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INDUSTRIAL RELATIONS IN THE BUILDING INDUSTRY

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INDUSTRIAL RELATIONS
IN THE
BUILDING INDUSTRY

BY

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DR. HABER'S book is the result of years of laborious work; and it has had the benefit of advice and criticism from many competent sources. It is an important contribution on the industrial relations in one of the most troubled parts of our economic life. The Wertheim Committee is glad to publish it, being convinced that it will serve not only to make clear what the difficulties have been but to help toward removing them.

F. W. TAUSSIG, *Chairman.*
MELVIN T. COPELAND.
JAMES FORD, *Secretary.*

PREFACE

THIS book seeks to describe the major industrial problems in the construction industry, to relate them to the technical changes taking place and the business methods prevailing therein, and to present the elements out of which a more stable industrial relations policy can be evolved. It is the result of an extended investigation among the historical materials dealing with labor organizations and employers' associations and of gathering first-hand information through interviews with contractors, labor leaders, architects, and engineers.

The limitation to this approach is one of method. The many problems which arise in this project do not lend themselves to quantitative measurement. The diverse opinions on controversial issues which characterize industrial relations make sound qualitative judgment difficult. A number of obvious limitations presented themselves at the outset. The first had to do with a territorial restriction. The building industry is carried on in much the same manner all over the country. Methods, processes, and joint-relations machinery differ only in minor respects. For reasons of historical significance as well as geographical location three cities, New York, Chicago, and San Francisco, were studied intensively. Other important building-trades centers were given such special consideration as their industrial relations problems warranted.

The second limitation arose from the fact that a large part of the study deals with the so-called closed-shop union centers. Lack of time, as well as other factors, prevented a thorough study of open-shop cities like Los Angeles and Detroit. Finally, for those centers studied intensively, only the more important problems in industrial relations are treated. Others, less important but not insignificant, are merely suggested, and their relevancy to the larger questions pointed out.

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PART I

INTRODUCTION

CHAPTER I

CONSTRUCTION—"THE BALANCE WHEEL OF AMERICAN INDUSTRY"

THE building industry has attracted public attention for many years. Legislative investigations have labelled it, with its periodic manifestations of discord, as one of the worst-conducted industries in the United States. A Chicago arbitrator in 1921 referred to it as "a thing diseased . . . a line of activity which the wise dollar avoided." Although highly organized for labor relations, building construction is subjected to frequent stoppages on account of disagreements between the workers and their employers. The engineer and efficiency expert point out that in many instances the industry operates with primitive methods, using hand labor when mechanical means are available to do the work better at less cost. This inefficiency in technique is accompanied by inefficiency in business methods, where antiquated ways of estimating, selling and competing for work entail much waste and duplication of effort. Not only are its business practices in general wasteful, haphazard and far behind those of other American industries, but the competitive struggle results in combinations among various producing groups, which restrict competition, maintain prices and apportion business territory. At times even labor organizations are made partners in a conspiracy to mulct the consumer. Building costs are abnormally high and a housing shortage occurs periodically. These conditions have aroused in the public — the average person — a deep interest in the problems of the building industry.

The student also is keenly interested in this industry because he finds in it the most important remnants of the technique of

the handicraftsman. Until very recently, it had been but little affected by the machine process. The changes taking place in technical methods, while no more revolutionary than such changes in other industries, present problems far more significant, since they date from a comparatively late period and, in many instances, have only just begun. Important practices existing in the industry among the workers and contractors are found to be closely related to these changes. Often the practices still continue, although the causes which brought them into existence either have long disappeared or are slowly ceasing to be operative.

Unaffected until recently by the dynamic changes which characterized other American industries, the building-trades workers, temporarily protected from the inroads of machinery, developed the most powerful group of labor unions in the country, and are at the present time the largest constituent group within the American Federation of Labor, numbering more than one million men. These workers, organized in seventeen international unions and federated in the Building Trades Department, have exerted an important influence on the trend of industrial relations in their trades. The working rules enforced by these unions, the system of collective bargaining developed in many localities, the jurisdictional conflicts among the unions themselves, the methods used at times to enforce their programs, and the limited viewpoint entertained by the building-trades unions generally — all these have given the labor organizations in the building industry a distinct place in the public mind.

Particularly significant are the social philosophy and point of view generally accepted by these unions. Sufficiently conscious of his narrow craft interest to refuse coöperation which might result in obliterating even partially his craft identity, the building-trades worker views his organization as a business institution paying dividends in the form of higher wages, shorter hours, better working conditions and greater control

over those factors which endanger the security of the job. Accepting the viewpoint that the union is a business institution bargaining in the most effective way for substantial remuneration for its members' services, the practices and policies enforced are not unlike those enforced by business men generally. "Business unionism," if by that term we understand conservative unionism, embodying a philosophy which is essentially opportunistic, has seen its most advanced development in the building trades. The leadership of these unions has been conservative, little interested in "program making" and even less inclined to meddle with the general questions which attract labor movements in other countries.

The employers present equally interesting problems. The building business is highly competitive and full of uncertainties. The weather, a business depression, price fluctuations, high interest rates, a labor strike — these may at any time throw it into confusion. Unlike the great basic industries of the country, the construction industry is an open door for small producers to try their luck. The contracting business usually requires little capital and many enter into it with little managerial experience or skill. The small contractor, operating during the busy season and eager to cut prices in order to get business, is a constant threat to the stabilized employer. Remedial efforts must, therefore, differ from those used in other industries.

These remedial efforts are impeded, moreover, by the intermittent and seasonal character of building operations, and by the further fact that the industry is to a large extent conducted on a "cost-plus" basis. This mode of operation removes from the employer a direct penalty for inefficiency. It is on this account also that building contractors show so little resistance to the prevalence of uneconomic practices, whether these result from the operations of incompetent contractors or are imposed by the union. Cost-plus contracts further explain, in part, the effectiveness which has at times been attained by combinations of workers and employers in the building trades.

Construction occupies an important place among the industries of the nation and is recognized as an important barometer of the general trend of business. The National Bureau of Economic Research recently estimated that from eight to twelve per cent of the national income is spent on construction. Approximately two and one-half million people are directly engaged on buildings and highways. The United States Census of Occupations showed 2,467,500 employes and independent workers in the "building trades" in January, 1920. Compared with manufacturing industries, the construction trades were exceeded in number of employes only by the iron and steel industry with 3,107,082 workers. Textiles employed only 967,777 persons. In the extraction of minerals, 1,018,967 workers were employed, and steam railroads accounted for 1,108,424.[1] But to the 2,467,500 wage earners engaged in the "building trades" in 1920, must be added those engaged in supplying the erection trades with materials and tools. The number employed in subsidiary industries such as sawmills, woodworking establishments, cement plants, steel and rolling mills, brick and tile plants, stone quarries, and in manufacturing paint, hardware, and other building materials, approximates another million workers. The building industry employs directly more than six per cent of those engaged in gainful occupations, and from ten to eleven million people are directly dependent upon construction for a living.

The size and importance of this major industry have been largely overlooked because, even to the statistician, it appeared as a host of separate and distinct industries. The products of lumber and timber alone, according to the 1925 census, amounted in value to more than three and one-half billion dollars, ranking eighth in this respect among those of sixteen industrial groups. The 22,000 establishments in this group gave employment to 921,145 wage earners. The 8,500 establishments producing stone, clay and glass products, a major portion of which is destined for building construction, em-

ployed over 350,000 wage earners, and in 1925 the value of their product was in excess of one and one-half billion dollars. The 145 plants engaged in the production of Portland cement employed more than 38,000 workers, and their product was valued at $300,000,000. The number of workers engaged in the production and distribution of structural steel, brick and other clay products, building stone, sand and gravel further swells the army of wage earners dependent on building construction for their livelihood. These various units all functioning in construction were, until recently, regarded as independent industries. Only when the host of industries producing building materials and the many occupational groups engaged in erection processes are both considered, is it possible to visualize the immensity of the construction industry, as to the number of men employed, the amount of money involved in the production and distribution of its output, and its influence on other industries.

The importance of the construction industry as a barometer of the general trend of business is indicated by its annual volume. The high totals in volume and value reached by building construction since 1921 have had a direct influence on general prosperity. No industry affects other industries more intimately than does this one. It provides a market for a preponderant percentage of such products as steel, lumber, stone, brick, paper, paint and glass. The building industry is, for example, the second largest customer of the steel industry, consuming about 14.9 per cent of the total steel output in 1927, as compared with 13.3 per cent taken by automobile manufacturers, and 20.4 per cent by the railroads. Probably more than 60 per cent of all the lumber cut in the country is used for building-construction purposes. Buildings create an almost immediate market for furniture, carpets, furnaces and household goods. From practically every angle of its operations the construction industry touches other industries directly, and affects the prosperity of millions of people. The tables

below show the number of workers in certain building trades and in some building-material industries in 1920.

The value of building contracts awarded in thirty-six states in 1926 was reported by the F. W. Dodge Corporation to be $6,121,000,000, as compared with $5,822,000,000 in 1925, and $4,486,000,000 in 1924. The United States Department of Commerce estimated that in 1926 the total volume of construction for the entire country aggregated more than $7,000,000,000. This volume of construction compares with $6,449,000,000, representing the gross operating revenues of the steam

TABLE I

NUMBER OF PERSONS ENGAGED IN CONSTRUCTION, 1920
(BUREAU OF THE CENSUS AND DEPARTMENT OF LABOR)

Occupations	Employees	Employers, Independent Workers, etc.	Total
Construction:			
Engineering construction: road and street building and repairing	129,829	....	129,829
Building erection:			
Builders and contractors	....	90,100	90,100
Brick and stone masons	132,698	....	132,698
Carpenters (83% of total)[a]	696,143	44,369	740,512
Cranemen, hoistmen, etc. (⅓ of total)	18,944	....	18,944
Electricians (⅓ of total)[a]	74,175	....	74,175
Laborers	623,203	....	623,203
Helpers (building and hand trades)	63,519	....	63,519
Mechanics[b] (10% of total)[a]	26,765	1,409	28,174
Painters	233,961	16,152	250,113
Paper hangers	17,981	937	18,918
Plasterers and cement finishers	43,980	2,294	46,274
Plumbers and gas fitters	193,432	20,672	214,104
Roofers and slaters	11,628	....	11,628
Semi-skilled (building and hand trades)	7,003	....	7,003
Structural iron workers	18,836	....	18,836
Subtotal	2,162,268	175,933	2,338,201
Total (construction)	2,292,097	175,933	2,468,030

(*a*) This proportion of total estimated to be engaged in the building industries proper. The remainder of those reporting as engaged in the occupations named are assumed to be employed in other industries.

(*b*) Not included in other classifications.

TABLE II

WORKERS IN BUILDING-MATERIAL INDUSTRIES AS REPORTED BY UNITED STATES CENSUS, 1920

Industry	Number of Workers
Brick and Clay Products	105,553
Glass	83,713
Electric Fixtures	10,000
Structural Iron	43,000
Asbestos	1,500
Tile and Terra Cotta	76,000
Cement	25,000
Marble and Stone	32,000
Steam and Hot Water Fittings	36,000
Lumber and Timber Products	480,945
Total	793,711

railroads in 1926, and with $3,371,856,000, representing the 1925 value of motor-vehicle manufactures, the largest manufacturing industry in point of output. If only 40 per cent (a low estimate) of the total cost of construction is now chargeable to labor, the industry must have paid in wages and salaries during 1926 approximately $3,000,000,000. This again contrasts with $658,000,000 paid by the motor-vehicle manufacturers during 1926, and with a railway wage bill for the same year, of $2,990,000,000. "It is probable, therefore, that the construction industry is the largest single disburser of wages in our entire business community."[2]

At least one important student of the barometrics of business has come to the conclusion that every serious industrial depression in this country has been preceded by a period of rapidly rising construction costs, coincident with a volume of construction expanding to a point considerably beyond the capacity of manufacturers to supply materials; that the real cause of industrial depressions is to be found in the wide fluctuations of construction volume, and in the resulting wide fluctuations of construction costs.[3] As a result of these findings, he concludes that the stabilization of this industry is a

necessary first step in any attempt to remedy business depressions. Chart I shows the relation between the volume of building contracts and general business activity.[4] The letting of building contracts generally precedes business activity. Although there has been considerable dispute as to whether the automobile industry has a greater influence on general business conditions than the construction industry, it is worth while to note that since 1919 the seasonal fluctuations and rate of growth in building contracts have been very much like those in automobile production. But it is not without significance "that a number of motor car manufacturers now follow building contract records in developing their sales plans." [5]

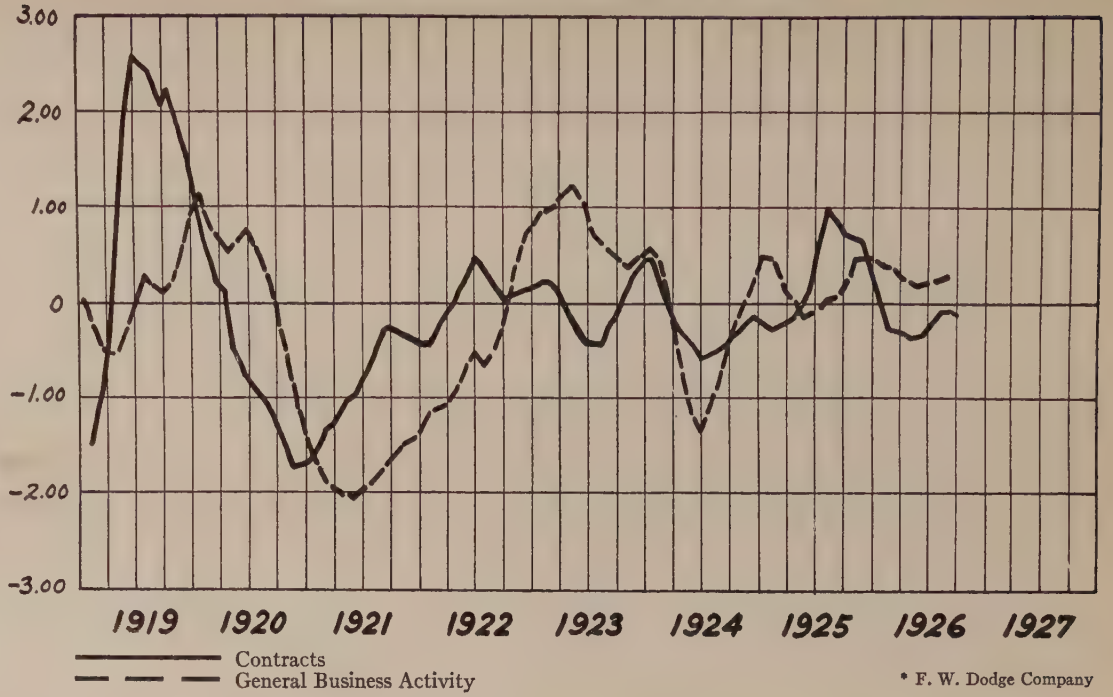
"No analysis of business conditions in this country," writes the statistician for the F. W. Dodge Corporation, "can at any time be complete or authoritative that fails to take building conditions into account. It is not at all likely that this country can enjoy a real prosperity at any time when its construction industry is employed at anything much less than full capacity. It is always one of the most important contributors to general prosperity as well as one of the largest recipients of the accumulated surpluses that result from prosperity." As a result of this significant interrelationship, construction has correctly been termed the "balance wheel of American industry." [6]

The labor-relations problems produced by this vast industry have been influenced by two factors. In the first place, methods of building erection are constantly changing. The technical revolution both in construction methods and in materials used has reacted on the bargaining power of labor and employer, and has produced distinct problems which must be analyzed with these changes in view. At the same time, the competitive practices and business methods prevailing in the building trades have colored many questions facing the workers and the employers. Part I indicates the nature of the problem presented by the building industry and the importance of the latter as a barometer of general business con-

CHART I

BUILDING CONTRACTS (IN SQUARE FEET) AND GENERAL BUSINESS ACTIVITY *

Seasonal Fluctuations and Secular Trend Eliminated



* F. W. Dodge Company

ditions. Part II examines the economic environment in which the two groups operate, and presents the industrial background out of which the problems arise. These problems — seasonality, labor supply, jurisdictional disputes, working rules and the closed shop — which present the primary elements of instability, constitute the subject matter of Part III. The efforts to control these form the most significant contribution of workers and employers. Part IV, therefore, deals with the history of labor organizations and that of employers' associations. Since, however, the local characteristics in this industry present problems which preclude general treatment, three chapters are devoted to the history of labor relations in some of the more important building centers of the country. Finally, those issues which lend themselves to solution by coöperative effort of all groups functioning through a community organization, are described in the chapter on the Building Congress Movement. Part V summarizes the most important obstacles to the stabilization of industrial relations, and indicates the trend of movements to overcome these obstacles.

PART II

THE INDUSTRIAL SETTING

CHAPTER II

THE INDUSTRIAL REVOLUTION IN THE BUILDING INDUSTRY

THE industrial revolution in the building industry is still in progress. American manufacturing establishments began the mechanization of their processes soon after the Civil War. The building industry, however, was unaffected by any substantial changes until after 1900. Even today much of the work is done in the same manner as fifty years ago; many of the trades are still primarily hand operations, and others have changed only in minor respects. The changes which have occurred, however, have been sufficiently vital to influence nearly every important problem.

These improvements have largely occurred in the lifetime of an individual. A contractor of thirty or forty years' experience has seen building-construction methods develop from handwork to highly mechanized processes, from the time when carpentry and masonry were the two basic trades, and wood and brick the two primary materials. Today he sees how the new technology has produced the modern contracting company with its departmentalized construction, its national operations, and its advanced business methods and practices. The new building technology has necessitated minute specialization and division of labor, which in turn have aggravated many industrial problems and introduced new issues. Few persons associate mechanical changes in building construction with such important trade-union questions as efficiency, restriction of output, wage scales, apprenticeship, jurisdictional disputes, or with the many competitive evils abounding in the business. The purpose of this chapter is to indicate the relationship between these problems and the development of building technology.

1. Technical Changes in Construction Methods

In 1865 New York was a city with a low sky line. Square miles of territory were covered with houses three or four stories high. The Astor House and the Fifth Avenue Hotel were considered gigantic structures. Mercantile buildings were rarely over five stories in height. Today the Singer Building rises to the height of forty-seven stories, and the Woolworth Building to fifty-one. The invention of the elevator and the use of steam for heating accelerated the transformation, but practically all modern features of commercial and manufacturing building construction, except plumbing, date from the introduction of the iron-and-steel skeleton.

(a) *The Use of Iron and Steel.* In colonial times iron was used chiefly for ornamental purposes. The village blacksmith forged railings, shutters, gratings, stairs, and similar fixtures from English iron. Later, when the use of iron increased, its forging was done by housesmiths, as a specialized branch of blacksmithing. In due time housesmiths added foundries to their smithies, and iron was introduced for structural purposes. Roof trusses, heavy riveted girders, and similar iron and steel work were manufactured in rolling mills.[1]

The pioneer iron foundry, established in 1840 in New York, cast columns, lintels, beams and girders, as orders were received from the housesmiths. The use of one-story iron fronts with rolling iron shutters for doors and windows increased. Then, as the danger from contraction and expansion was overcome, entire fronts of cast iron were erected even for five-story buildings.[2] Though a building of more than five stories had many advantages, certain definite limitations made greater height unsafe. Fire-fighting apparatus could not cope with fires on top floors. Fireproof materials had not as yet been perfected. Iron was believed to be fireproof and was enthusiastically endorsed by architects. The great Chicago fire in 1871 proved its inadequacy.

The use of cast iron in buildings had its day, but by 1900 it had been largely displaced by rolled steel, known as structural iron or steel. This, when properly protected, was a fireproof material. Its phenomenal development began about 1885, when the Bessemer process, discovered in 1856, became commercially successful. Rolled steel for bridges, building and other structures could be made in any required shape, quality and tonnage.[3]

(b) *The Elevator.* However, it was the elevator which made tall buildings feasible. Fire hazards could readily be minimized with fireproof materials, but without the elevator it would still have been unprofitable to build high. About the middle of the nineteenth century, freight elevators or hoists of simple form were utilized for vertical transportation of goods and materials. The first steam passenger elevator was placed on the market after 1850, but its operation was slow and clumsy. In the United States about 1870 various modifications of freight elevators were made, adapting them for passenger service. The water-balance lift was a common one in use and an early type, installed in the Western Union Building in New York, survived until a few years ago. The vertical cylinder type of hydraulic elevator, invented by C. W. Baldwin, was introduced in New York in 1878. This machine soon became standard, lending itself to increased range of operation. With the development of steel-frame construction, the hydraulic elevator was improved both in regard to height of travel and speed.

After 1890, with the growing use of electricity and its general availability for power, the electric elevator was developed, and was destined soon to be very generally employed. The credit for the first successful application of electric power to elevators belongs to W. Baxter, Jr., whose invention was first installed in Baltimore in 1887. Two years later a more successful electric elevator designed by N. P. Otis was introduced in New York and installations soon followed. After 1904 this was de-

veloped by the Otis Elevator Company, and became almost standard, especially for tower buildings where a high lift is required. This and the hydraulic elevator of the plunger type are now most commonly used in the United States.[4]

(c) *The Steel Skeleton.* But the elevator was only one of the factors which made possible the tall modern structure. In fact, if the elevator had been the only revolutionary improvement in building, the heights of buildings would have adjusted themselves to the technique then prevailing, and the sky line would have remained about half its present height. Masonry wall construction was a limiting factor. The masonry form of construction necessitated massive walls to support the structure above the first story. The higher the building the thicker the lower walls, and consequently in ten-story buildings the rentable space on the first floor, the highest rent-producing space, was somewhat reduced. Economy of space was a potent incentive in the search for a new building material. Structural steel made the skyscraper possible. Masonry walls can be distorted by storms or by settling of the foundation. Steel beams and columns can be riveted or welded to each other, and braced and tied, so as to resist the destructive effects of these forces to a far greater extent. Steel buildings can be built as high as the wildest fancy is likely to aspire, provided the foundations can hold them.[5]

The steel frame supports the entire building. Other materials, such as brick and stone, perform some other function than that of giving strength. In the older forms of construction, brick and stone were used primarily for that purpose. Beauty, grace, finish and even cost were entirely subordinated to considerations of strength. Now these materials are used chiefly to enclose the structure. Thick walls are unnecessary; no matter how high the building, exterior walls of brick or other material need not be heavier at the bottom than at the top.

Another important change that the steel frame has brought

about is the concentration of loads. Walls tend to diffuse and spread the loads they carry. They act as beams and columns at the same time. Partition walls are now largely independent and may be very light, whereas in the old buildings they were very heavy. Since each floor is supported in turn by the columns beneath it, such walls may now be built in any way and in any place desired.[6] The first steel-skeleton skyscraper was completed in 1889, the same year in which the electric elevator proved itself a success. In 1890 in New York City, these two mechanical devices, the electric elevator and the steel skeleton, were, for the first time, both used in the same structure, the Waldorf Astoria Hotel.[7]

Steel, in addition to having made high buildings possible, offers a number of advantages for building construction. It is relatively cheap. The reduction in the thickness of walls permitted by the use of steel, renders more renting space available on the floors producing most income. It can be erected more speedily than other materials, thus making an investment profitable much sooner. It is estimated that a building which requires twelve months for construction when a steel skeleton is used would require two years if made of masonry. The amount of the overhead charges, taxes and interest on the steel building is between 4 and 5 per cent; on a masonry construction it is between 12 and 15 per cent. The most important advantage claimed for steel construction is its greater permanence and strength. Steel, if properly surfaced with concrete or other material of low conductivity, becomes an excellent fireproof material. The San Francisco fire of 1906, in which the few steel buildings were the only ones to remain intact, affords ample proof.

(d) *Foundations*. High-speed elevators and steel-skeleton construction were not, alone, sufficient to make the modern skyscraper. A more substantial foundation was essential to support the huge structure. The advent of the steel skeleton, with its concentration of weight in single columns, rendered the

old-type masonry footings inadequate.[8] The first foundations for large buildings were of stone or concrete laid upon the earth, whereon were built the foundation walls. In soft or marshy places, ranging timbers or piles were driven down to solid bearings. Inverted arches were used between "isolated" piers, when the nature of the ground and character of the building made it necessary to distribute the weight of the superstructure over a larger area. Later came the use of rolled-steel rails or beams, in the form of grillage resting on a concrete bed. Then grillage work was used over the entire area of the building. Lastly, came the crowning feat of carrying piers by the pneumatic caisson process to a great depth until hardpan or bedrock was reached.

The pneumatic caisson method is of comparatively recent origin, although a mechanism for compressed air was patented in England about 1830. In 1893 the first pneumatic caisson was constructed for the Manhattan Life Building in New York City, to overcome the dangers of a site where there were quicksands.[9] The piers, which were sunk to rock with compressed air, were built of brick because brick was believed more reliable than concrete. When the Mutual Life Building was erected in New York in 1900, Alfred Noble designed a caisson wall forming a continuous cofferdam, to permit the cellar excavations going below water level. This was one of the first examples of the use of cofferdams for buildings. After 1893 caisson construction improved rapidly, keeping pace with the needs of superstructures.[10]

(e) *Reinforced Concrete.* It is improbable that the extensive development of reinforced concrete would have taken place without the economical rolling of small steel shapes. In England and the United States, the combination of steel and concrete resulted from efforts to find a fireproof material. Progress of concrete construction since its inception can be measured by the production of Portland cement, invented in England in 1827. In 1882, 82,000 barrels of Portland cement, together

with natural and other kinds of cement then common, were produced in the United States, and used chiefly for foundations and underground work. In 1885, E. L. Ransome of San Francisco invented the twisted bar and demonstrated how steel bars encased in concrete could withstand transverse loads. At this time the production of Portland cement was 150,000 barrels. From 1885 to 1890, while the steel-frame structure was being perfected, Ransome was engaged in teaching the industry the value of his discovery. Architects and engineers hesitated to adopt an untried type of construction in preference to the steel skeleton. But the introduction of the expanded metal-and-mesh system enabled architects to retain their steel structures and use concrete for filling and architectural work between beams, in place of brick and stone. In 1895, 900,000 barrels of Portland cement were produced. In 1897 and 1898 came a great shortage in structural steel. Deliveries were uncertain and architects more readily accepted reinforced concrete as a new material.[11] In 1900 the production amounted to 8,482,000 barrels. By 1905 concrete had passed the experimental stage; 35,246,000 barrels of Portland cement were produced in the United States. The production in 1926 was 164,057,000 barrels.

Concrete has been known from the earliest ages. Reinforced concrete is simply an improvement over the ancient method of mixing mud and straw. Concrete possesses great strength in compression, while in tension it is weak; but the reinforcement with steel bars and wires adds the required tensile strength. It is possible to combine the two materials because they expand and contract in almost the same ratio. The typical reinforced-concrete building is constructed similarly to a structural-steel building. The same factors which, in 1900, favored the use of structural steel are now increasing the popularity of concrete as a building material. It has already been mentioned that, in cities where property values are high, it is essential that a building have a maximum amount of

usable space for a given ground area; and the use of structural-steel cores fireproofed with concrete has played an important part in the development of buildings which meet this requirement. One large construction company alone reports that since 1923 it has erected 50 per cent more concrete structures with steel-column cores than in the preceding twenty years of its history.[12]

The determining factor in the choice between reinforced concrete and steel is cost, the former running from 10 to 20 per cent lower than the fireproofed steel construction. The choice is also affected by the cost of transportation, by availability, type of labor supply, particular purposes of use and personal preferences. Building with concrete is more subject to climatic handicaps than that with structural steel, but an elaborate technique of preparation and protection has been developed, which makes it as certain and safe as any.[13]

(f) *Substitutes for Lumber.* The increasing urban population and high land values made intensive use of space necessary in the larger cities. Fire hazards made the use of wood in the construction of high buildings impractical. Wooden structures were displaced by those in which this material was of only minor importance. The apartment house displaced the detached wooden dwelling; the steel-frame skyscraper of fireproof construction succeeded the old business block. Fire losses, which in the United States in 1927 were $4.97 per capita, as compared with very much lower figures for Great Britain and other European countries, led to increasingly stringent ordinances, restricting the use of wood for building purposes within prescribed areas, known as fire zones. These constituted, however, only one group of the economic forces which brought about a rapidly increasing substitution of iron, steel, cement and other materials for lumber.[14]

Some of the most important causes of substitution center about prices and the comparative utility of lumber and competing materials. For example, soft wood one-inch stock in-

CHART II

PER CAPITA CONSUMPTION OF FOUR MAJOR BUILDING MATERIALS *

* National Lumber Manufacturers' Association

creased in cost during the past half-century more than seven times, owing to the depletion of the forests, and to rising transportation rates. The price of cement, however, from 1885 to the present, with the exception of several post-war years, shows a downward curve. In cases where substitutes for lumber have a higher initial cost, they still are often cheaper than lumber, on account of subsequent lessened costs of upkeep, risk and endurance. The use of composition roofing in place of wooden shingles is only one illustration.[15] There are some substitutes, on the other hand, which are probably less fire resistant than lumber and require an equally high expenditure for maintenance. Some of the substitute roofing materials, such as the poorer grades of rolled roofings, are considered a greater fire hazard than edge grain shingles.

However, substitutes for wood have been placed on the market by high-pressure salesmanship. Organized advertising, additional services such as estimating, a high degree of standardization of quality, and accurate specifications have brought these materials to the forefront. For a long time the lumber industry did not have such aids. Exact information as to the relative strength of different grades of wood was lacking. Variations in stresses allowable for the same kind of timber ranged from 1200 to 2500 pounds per square inch; for steel and concrete the exact stress was known. Architects, therefore, favored the use of a material whose strength had been definitely determined. Chart II compares the per capita consumption of four major building materials in the United States in the past twenty-five years. Of the four materials, only lumber shows a per capita decrease in consumption. In recent years the lumber industry, as a result of intensive coöperative effort, has undertaken research and advertising activities, and through its trade-extension bureaus has materially improved its position.

Not so many decades ago the supremacy of lumber was unchallenged. Houses, factories, vehicles of all kinds and even

sidewalks were of wood. In the modern fireproof office building wood is slowly disappearing. Metal window frames, doors, trim and even furniture are being more generally adopted, although there are still many buildings equipped with lumber products. "Now," says Dr. George Otis Smith, Director of the United States Geological Survey, "the entire framework of our civilization is being changed from wood to minerals as the end of our forest reserves comes into view and as modern machinery makes it possible to build more durably out of sand and stone and clay, of which there is no end." He gives the following recipe for making an office building: "Take by weight 60 parts of gravel, sand and crushed stone; 58 parts of tile and brick; 27 parts of building stone; 19 parts of cement and 16 parts of steel, with such other ingredients as copper and glass and asbestos, and paint to suit one's taste." [16]

2. Improvements in Manufacturing Processes

The rapid expansion of the building industry and the consequent increase in demand for building materials have greatly accelerated the mechanization of the industries producing materials. Since 1900 machinery has in large part taken the place of manual labor in the lumber mills and yards and the woodworking industry generally. In the manufacture of cement mechanical methods have almost entirely replaced hand methods. In some sections of the country, the making of brick is entirely a mechanical process, while in others hand methods still prevail. The production and fabrication of steel have for a long time been carried on under the most advanced mechanical processes.

(a) *Brickmaking.* The increased demand for fireproofing materials, such as brick, brought about a complete revolution in their manufacture. Until 1835 no attempt was made to improve the primitive hand methods of making brick. The horsepower brick machine was invented in that year, but was not operated by steam until 1840. After the Civil War brickmak-

ing machinery, consisting of a small engine and a set of rolls, appeared. A little later a wet pan was added to mix the clay with water. All other work from the mining to the loading on boats was done by hand. Bricks were sundried; therefore their production was concentrated in the summer. A day's output per man consisted of 3,500 bricks, which was later increased to 4,000.

But a great change in the brickmaking industry soon followed. Higher costs, greater competition and decreasing prices made mechanization necessary. Machinery was put on the market to take the place of hand labor. The clay rolls were displaced by grinding pans; the old-fashioned wet pan by the pug mill; molding by the soft-mud machines; and the laborious shoveling and wheeling of clay by elevators.[17] Mechanization did not affect all regions equally, however. The hand processes were discontinued only in localities where natural conditions were unfavorable. In the Hudson River district in New York State, for example, bricks are still made largely by hand.

Between 1870 and 1890 the brick industry developed from small scattered undertakings to a commercial enterprise of large proportions. Recently there has been a striking increase in the use of electricity as the motive power in the brickyards of the country. Machinery was developed which eliminated all hand labor from the time the power shovel took the clay out of the ground until the hodcarrier brought the bricks to the mason on the wall. Even this latter process can now be eliminated by a handling device which delivers the bricks to the bricklayer without the intervention of the hodcarrier.

The difference in efficiency between the plants which use modern methods and those using hand methods was pointed out in a study made of four plants by the New York State Housing Commission. The following number of man hours was necessary for the production of 1,000 bricks.

	Man Hours Required
Plant 1	9·5
Plant 2	7·4
Plant 3	5·25
Plant 4	3·7

It would seem that competitive conditions should at once destroy all plants using a method so much more costly (than Plant 4, for example). But it is the very existence of present competitive conditions that keep them in operation. The present capacity of the industry is far in excess of the market. All of them operate at a low proportion of capacity during the months of November to April. The plant that is operated on a mechanical basis has relatively high carrying charges. As long as such plants do not operate at or near capacity throughout the year, the plant on a hand basis can compete.[18]

(b) *Cement and Other Materials.* Equally significant has been the development of the cement industry. The huge totals which cement production has attained in recent years would have been well-nigh impossible without a great development in mechanical processes. There are three distinct operations in the manufacture of cement. The first process is mechanical and includes the assembling, preparing, grinding and amalgamation of the raw material. Immense gyratory or roll crushers reduce the huge masses of quarried rock to small-sized pieces. These are passed through dryers, horizontal steel cylinders revolving as the crushed rock passes slowly through. A current of heated air flows slowly through the cylinders, evaporating the moisture which would otherwise prevent efficient pulverization. The second process, consisting of calcining or roasting at a high temperature, brings about a chemical combination of the various ingredients. The final process, partly mechanical and partly chemical, reduces the clinker resulting from the calcination, together with a small amount of retarding agent, to a fine powder.[19]

These mechanical processes have produced great changes in the efficiency of cement mills in recent years. For example, the records of one of the important companies show that in 1925

it produced 1,000 barrels of cement with 561 man hours of labor; in 1921 to produce the same amount of cement required 739 man hours, and in 1919, 836 man hours. Although the figures for the industry as a whole are slightly higher, all show a marked improvement in efficiency, due to mechanization.[20]

Factory methods have been applied to the production of limestone, wood products, steel, and many other commodities used in building construction. The manufacture of building materials supplying the metropolitan markets, has in most instances been reduced to pure machine processes, and improvements in methods of manufacture are fast extending to the smaller establishments. Many materials arrive on the job ready to be installed.

3. Mechanization of Building Operations

Equally important is the mechanization of major operations in construction. A volume of business for buildings and highways, amounting in 1927 to more than $7,000,000,000, could not have been obtained without the aid of machinery. This program would have overwhelmed the resources of contractors twenty-five years ago, when hand labor supplemented by a limited amount of crude mechanical methods predominated. The construction industry was one of the last to use power. Indeed, even today, building operations conducted outdoors use more hand power than those which are housed. Mechanization of the industry was by no means rapid. During the Civil War mechanical improvements were greatly accelerated by the shortage of labor. After the war came many changes in the methods, tools and appliances used in building construction.

It was not until this country entered the great era of transcontinental railroads, beginning in the seventies of the last century, that any real incentive was offered to the inventive genius in the construction equipment field. Up to this time machines for particular purposes had been built for individuals. There were few for use in the building industry. When the

large-scale projects were planned, however, an opportunity appeared for more extensive use of machines in construction. Today about five hundred manufacturers produce machinery for construction purposes.[21] Where twenty or thirty years ago the use of machinery was confined mostly to large builders, today almost every builder has some machinery in his shop and on the job. There is now an efficient machine at a reasonable price for almost every operation formerly done by hand.

(a) *Power Machinery.* There are many devices in use today which facilitate the work of the builder. Without the hydraulic or pneumatic riveter, steel-frame buildings would be almost impossible. In 1898 the pneumatic riveter, which is now indispensable in steel-skeleton construction, was invented. The use of rock drills and pneumatic tools had been common in quarrying, but it was only after 1898 that the woodpecker-like rat-tat-tat was heard in the construction of steel skyscrapers. Two men with pneumatic drills and riveters can do the work of eight. In quarry and rock excavation pneumatic and power-driven machinery have entirely replaced hand labor. Other pneumatic appliances are used on such stonework as chipping, dressing, polishing and carving. At the present time electrical welding is coming into use. Engineering tests show that joints in structural steel welded by this process are stronger than riveted joints. Improvements in electrical welding are making the use of this process possible even on small buildings. It is still, however, in the early stages of its development and efficient methods of inspection must be devised and maintained to insure against structure failures.

Nor, without the power hoist and derrick, could heavy girders, columns and other building materials be swung into place so easily and quickly. When one bucket loader does the work of eighteen or twenty shovelers, manual labor looks expensive; an equal number of wheelers who handle sand, gravel and the like are displaced by a portable-belt conveyor. Materials which four men require thirty minutes to load can be

handled by one man with a portable-belt conveyor in five minutes. An ingenious car unloader is in use which takes a freight car in its embrace, dumps its contents and replaces it on the track.

The first steam shovel was manufactured in the United States in 1839 under the Otis patents. While successful, it was a rather crude affair, killing the inventor, who operated it. The power shovel of today is safe, more powerful and more efficient in every way. It came into general use in the eighties, for railroad construction. Smaller revolving machines were later perfected for lighter work and proved indispensable on both large- and small-scale work. In addition to steam shovels, many types of electric and gasoline shovels are now on the market. There are also drag-line, clamshell and orange-peel excavators, dippers, hydraulic and elevator dredges, cranes and special hoisting machinery.

Even on small contracts, power excavating and handling machinery can be made profitable. In excavating foundations for small buildings such as residences, the horse-drawn scraper has proved quicker and more economical than hand labor. Now a small power excavator is rapidly replacing the horse-drawn scraper in all favorable conditions.

(b) *Concrete-mixing Machinery*. Mixers are used in practically all concrete or mortar work done today. While this applies primarily to the larger cities, since 1923 it has become almost equally true of the smaller communities. The old method of hand mixing is being discarded in favor of the more rapid, uniform and economical power mixing. In concrete construction, the aggregates, cement and water, are mixed like dough and literally poured into place without the touch of a human hand. Concrete mixers range in size from the hand mixer which can be used on smaller jobs, to the power mixers of twenty-eight cubic feet capacity and larger, into which the materials are constantly poured and the aggregates constantly delivered. Hand mixers would have made the use of concrete

in winter uneconomical, if not impossible. Under the machine process, however, heated materials are available for use in cold weather with little danger of damage. Concrete mixers often discharge into wheelbarrows, but on many large construction jobs they are placed so as to discharge into bucket hoists which elevate the mixture to the concrete-distributing towers. One tower serves the entire floor area from foundation to roof. Wheelbarrows are often used to distribute concrete which is to be poured into forms or over floors.

There is now also a machine for mixing lime-and-cement mortar. Mortar made by machine is a smooth putty-like mass in perfect condition for the bricklayer. One man with a machine can mix enough mortar for twenty bricklayers, reducing the labor to less than 25 per cent of that needed for hand mixing. When concrete mixers and gravity distributing towers were first introduced, they met with considerable opposition from engineers and architects who believed, and often justly so, that the quality of concrete was not as good, and that in passing through the spouting the concrete would disintegrate. By careful mixing and using sufficiently steep chuting angles, this danger is largely overcome. However, with the increasing use of the water-cement ratio in mixing concrete, the drier mixtures often do not chute readily; and architects frequently prohibit chuting on the structural portion of the building. Central-mixer-plant concrete is also prohibited to a considerable extent, unless special mixer trucks are used for its transportation. The widespread adoption of these methods has effected considerable saving in construction costs.

(c) *Motive Power.* The need for power in the construction field was supplied by stationary steam engines. Hoisting engines came on the market about 1880. Electric and gasoline motors as well as compressed air have more recently been applied to this service. Speed and ease of control have greatly increased since the improvement in the use of derricks and pile drivers and the application of power to hoists and shovels. The

work of excavation has been revolutionized. Once it took four men fifteen minutes to fill a wagon, if the earth were loose. Now the machine does it in one scoop. One gasoline crane takes the place of ten or twelve laborers. The hodcarrier is gradually disappearing before the invasion of the material hoist. Trenching, formerly done by hand, is now done by special power-driven machinery which cuts to line and grades at one operation. Frost, unless deep, does not delay excavation with power shovels. Pneumatic and power-driven picks will accomplish as much work per day in frozen ground as hand labor in unfrozen ground. Caterpillar treads applied to power shovels or other heavy machinery overcome the effect of soft, muddy ground.

One of the problems in the construction of the immense steel-frame buildings is that of hoisting materials weighing several tons. The old method of lifting by derricks with guy ropes and taking power from engines below, although still used, is expensive; and signaling by whistles or bells is uncertain and unsafe. Also the extra handling necessitates a large number of men at best — for a twenty-story building, quite an army.

The hand-operated hoist dates back for hundreds of years. In the sixties and seventies of the last century, decided improvements were made in the ease and economy of hoisting operations. The electric engine for hoisting was introduced in 1890, doing away with the steam and soot produced by the old-type engines. This was followed by the automatic control to prevent overwinding, to hold the load in case of failure of power supply, and to stop automatically at predetermined floor levels. The gasoline hoist was developed in 1905 to supply power where electric current was not available. Steel derricks were invented for use on the long-span bridges and steel buildings increasing so rapidly in dimensions.[22]

In the larger buildings the mason builders experimented with steam platform elevators, having discarded the horse-drawn derrick, used to some extent in the fifties, which had half-barrel

scoops wherein the bricks and mortar were raised and dumped wherever wanted in the building. But this was not an economical method except in large buildings of five or more stories. The first derrick for which steam was the motive power was used in 1870 for the foundation of the New York Post Office. It was in 1872 that the chain-ladder elevator was first employed for hod hoisting. In its original form it was operated by a hand windlass and was too slow in operation to be profitable. The application of steam to this elevator made it for a long time the most effective labor-saving device introduced in the building industry. By 1873, with the steam derrick for hoisting of stone and iron, a hod-hoisting machine and a platform elevator for other materials, the amount of labor for construction was reduced 50 to 80 per cent, varying with the height of the building.

(d) *Woodworking Machinery.* From the standpoint of saving of time and labor, woodworking machinery takes high rank. The handsaw probably will never be eliminated entirely, but it is distressingly slow in comparison with the power saw. This is particularly true of ripping jobs or sawing large beams. Circular saws, handsaws, planing machines, molding, mortising and boring machines are now common equipment in woodworking shops. Formerly everything needed for house construction was made on the site by the slow and laborious process of hand labor. Everything had to be cut and made by hand, from the doors and window frames to the stairs and newel posts. Millwork was an unknown process and it took a good carpenter the better part of a day to make a door or a window frame. There were no stock goods.

Similar mechanization of building operations has occurred in almost every trade in the industry. For surfacing hardwood, terrazzo, marble, tile, cork, composition and many other types of flooring, power surfacing machines have so completely demonstrated their superiority that they are today almost universally used. Take, for instance, the work of sanding a wood

floor. One man with a power surfacer can accomplish as much as six handworkers. Instead of slow, hard, manual labor, first scraping, then sanding, an excessively fatiguing job, the machine does the work much better in a fraction of the time.

(e) *The Cement Gun.* The cement gun invented in 1898 occupies a unique place in the building field, in connection with concrete work. It is mounted on large wheels and can be carted about. An air compressor is attached to the machine. The dry cement and sand in proper proportions are mixed with a stream of water just before the mixture leaves the nozzle. This nozzle is held by an operator who can direct the stream accurately over the surface to be covered. The cement gun can be used quite successfully for waterproofing, fireproofing, protection of steel and lining of tunnels. In building construction concrete is applied over wood and metal lath, hollow tile, brick or other building materials.

(f) *Other Improvements.* Today most contractors have concrete, mortar and plaster mixers, a block or a brick machine, saw rigs to cut rough lumber and wooden forms for concrete, pumps to clear the way for excavations, power shovels to scoop the foundations, motor trucks to haul the dirt away, paint-spraying machines, and plaster guns. A skyscraper of twenty or more stories can now be built within a year.[23]

The mechanization of the daily jobs on building operations continues at a rapid pace. Manual labor is totally eliminated on some operations and greatly reduced on others. Even for the highly skilled trades such as bricklaying, plastering and carpentry, mechanical improvements in certain operations reduce the amount of actual work, totally eliminate hand labor or lighten whatever work there is. The carpenter is an assembler in many operations where twenty or thirty years ago he was a skilled worker. In some trades mechanical devices actually threaten to exterminate whatever craftsmanship a trade possesses. Such is the plight of plasterers and painters, whose opposition to the plaster gun and paint-spray machine emanates from this fear.

Mechanization of building operations received its impetus during the years just preceding the recent war, but made its greatest gains during the labor shortage immediately thereafter. The manufacturers of building equipment argued that mechanical devices would largely reduce the working force, and would also prevent wages from soaring too high.

(g) *Hand Labor Still Prevalent.* But this advance has not been general. Although many revolutionary changes have occurred, a number of important building operations have lagged behind in mechanization. For mass operations, equipment and machinery such as the power shovel and concrete mixer have been perfected and extensively used. But for individual small operations, developments in machines have not kept pace. Very few machines are used on light tasks. The work of the mason, roofer, tile setter, carpenter, plasterer and painter is commonly a hand operation, even on large work, and is always performed manually on small buildings. In 1927, in thirty-seven states, contracts for residences constituted approximately two-fifths of the total number of contracts. Acres of plaster are still put on with hand trowels even in commercial buildings, and acres of painting are still a pail-and-brush operation, while yards of concrete floors are laboriously smoothed with hand floats.

Where the material comes to the job in a semifinished state, the assembling is done by manual workmen whose speed is limited by their hand tools. One cannot compare the speed per man of erection with the speed per man of production of building materials. The latter compares favorably with factory processes in other industries, whereas the former is still in a relatively undeveloped state. And even where machines exist to do hand operations, the financial inability of contractors to buy them or the opposition of workers to using them, keeps the industry in the handicraft stage. The bricklayers' union, for example, declared that "the success and prosperity of our calling is due to the non-existence of competitive machinery." [24]

The equipment of the modern structure has itself undergone changes almost as revolutionary as those in methods and materials. In a single generation our buildings have ceased to be mere shelters; they have become machines. What were once mere accessories or furniture have now become integral "built in" parts of a structure. For example, the electrical equipment of buildings, once a mere matter of bell wiring, may now include lighting, ventilating, heating, cooling, cleaning and cooking equipment. Today vast industries cater to the needs of our modern buildings.[25]

4. Forecast of the Future

The near future will see an increase in the mechanization of construction operations. Experimentation with new materials, processes and methods is continuing and innovations are being introduced which seem destined to outdistance the building improvements made during the past few decades. The latest discoveries of chemistry and physics are being turned toward practical application in the building industry. Progress will most probably be along the line of more extensive use of power and machinery.

The American Institute of Steel Construction sums up the development during the last three decades as follows:

> Did the steel constructor of thirty-five years ago ever see a vision of the year 1925 with the steel skeleton of a fifty story tower stretching toward the sky at the rate of three or four tiers a week, of mighty girders riding to the job on motor trucks instead of drawn by forty horses, of steel derricks and electric hoists raising the parts of the skeleton, of pneumatic hammers riveting them into place and air machines spraying on the protective coating? Did he ever dream a dream of rivets replaced by welds and the flame of the oxyacetylene torch doing the work of a man in a fraction of the time?[26]

The future of the building industry may bring changes equally remarkable and now beyond imagination.

5. Influence of Technology

The technical changes here described have had an important effect on the position of the different groups in the industry. There is an almost consequential relationship between the changing methods and processes of building construction, and the organization of the building business. The tactics, policies and status of the trade unions, trade-union rules, restrictive practices, efficiency of workers, jurisdictional disputes, apprenticeship training, the work content of different trades, the outlook of workers toward their jobs and specialization are all colored by the "new technology."

(a) *Effect upon Carpenters.* Probably the most outstanding illustration of the changes which the new technology and new methods have brought about is the position occupied by the carpenters. As early as 1894, P. J. McGuire, then general secretary of the United Brotherhood of Carpenters and Joiners, complained:

> Year after year work is becoming less plentiful owing to the recent innovations of architectural construction. With the introduction of iron and steel frames in the larger buildings, with iron and stone staircases, tile floors, tile or metal wainscoting, with cornices and bay windows in many cases of material other than wood, and with numerous changes going on, the increase and perfection of wood working machinery, the chances of steady employment of carpenters is extremely uncertain.[27]

As the use of new materials became more general, the carpenters had further cause to say: "The steel and iron worker, the stone and brick mason, the plasterer, the marble setter and tile roofer are rapidly usurping the place of the carpenters in all the large city buildings. In many large buildings wood has disappeared altogether except for doors and window frames which come ready-made from the factory." [28]

Modern conditions, demanding greater speed and more machinery, have changed many of the carpenter's tasks. Less than fifty years ago, beams, pillars and other heavy work were

fashioned with the axe and adz; window frames and doors were cut, fitted together and put finally into place by the carpenter. Even the carving of ornamental pieces such as moldings was done by hand. Today a great part of all this work is done by machinery in the mill. Doors and frames come ready to be put into place. The craftsman in this trade no longer needs a high degree of skill.

In the struggle for jobs the general policy adopted by the union of carpenters has been to claim jurisdiction over work formerly done by them, irrespective of the fact that the material is no longer wood. For instance, doors, moldings and trim were at one time of wood; the carpenter made and hung them. Now doors and trim are often of metal. Yet the carpenter maintains that he has a "vested interest" in these tasks, and lays claim to the erection of the new materials. We shall see below how vital these changes have been in creating jurisdictional disputes. The carpenter feels them keenly. Perceiving the trend of developments already begun, the secretary of the carpenters' union declared in 1904:

> Time was when the carpenter did all the building. When we got to building in large cities, the business had so rearranged itself, that the mason did the walls and the carpenter did the floors and the roof. Then came fireproof construction and the mason did the walls, floors and roof and the carpenter had nothing to do. Then the civil engineer began to refine the skeleton and now they are talking of buildings made of concrete which will rob the bricklayer who once robbed the carpenter.[29]

But concrete, which threatened to displace the bricklayer, supplied work to the carpenter. The material was poured into wooden forms which he made. Metal forms, however, are being substituted for the wooden ones, and experiments now show that reinforced-concrete walls can be erected without the use of forms. These changes, while increasing the demand for carpenters, have lowered the general skill of the trade. A considerable proportion of the carpenters in the larger cities are

employed on form work in concrete construction, where strength and moderate skill in the use of hammer and rule are all that are required. Few carpenters now are versatile enough to do the work which their predecessors did two decades ago. A man usually specializes in some particular branch of carpentry. This is particularly true of interior trimming, floor laying and stair building. In addition, there are carpenters who specialize on subdivisions of these trades, such as parquet floor laying, of which there are three branches. There are also ship carpenters and railroad carpenters.

The changes in technical processes and the use of new building materials have had a significant influence on the policy of the carpenters' union toward employers and other unions. The union saw the possibilities of ready-made trim displacing that finished by carpenters. However, as we shall see more fully below, it did not oppose the use of machinery, nor did it refuse to install machine-made wood products. It insisted that such products bear the label of the carpenters' union, which in effect meant that factory woodworkers, who belonged to another union, must join the carpenters' union. This was in 1890. By 1910 the United Brotherhood of Carpenters and Joiners had complete control of the unionized mills supplying the larger cities with wood products. No other union in this industry had a similar problem affecting it quite so much.

(b) *Effect upon Bricklayers.* Concrete encroached upon brickwork. During the years of its introduction, jurisdictional disputes and regulations seeking to restrict its use existed all over the country. Soon after 1900 the powerful Bricklayers', Masons' and Plasterers' International Union began to feel the seriousness of the intrusion of concrete. Plans were made to thwart its popularity as a building material. The 1904 convention of the union considered a resolution instructing the

incoming executive board to send out to each and every local notice to report to the *Journal* all concrete construction in their vicinity which shows defects of cracking, breaking, total or partial collapse

. . . and the same [to be] published in the *Journal* . . . and [this] can be used by all members as an authentic proof of the fact that brick, stone and terra cotta are here to stay, and are still the only safe methods of construction.[30]

The *Journal* of the bricklayers' union, during the succeeding years, carried editorials, articles and advertisements describing the collapse of concrete structures and ending with the usual warnings as to the deficiencies of the material and the danger of using it.[31]

Addressing the New York State Conference of bricklayers' unions in 1905, President Bowen of the Bricklayers', Masons' and Plasterers' International Union said:

> They [concrete buildings] are much less durable in construction than those of stone and brick. Concrete buildings have become a fad, and unless the style is killed the bricklayers' and masons' trade will die. Time will show that concrete buildings are far less durable than those constructed of brick and stone, but in the meantime members of our craft will die of starvation and old age unless people continue to have their buildings made of the latter material.[32]

The fact that this material was not installed by bricklayers led to the charge that the work was

> constructed by men unfit and incompetent in every way. . . . Concrete construction is a dangerous undertaking and requires the most skilled and intelligent direction. Our organization has contended that the adoption of the various concrete systems used in construction are experimental and uncertain at their best, and the work requires the most skillful mechanics and that all these concrete systems taking the form of masonry construction come under the skilled mechanic's jurisdiction . . . and we further maintain that bricklayers and masons are best fitted to do the work.

The futility of dictating methods of construction and technical processes to the industry became apparent. Agitation on the ground of safety against the use of concrete ceased and other tactics were adopted. "Forget that it is unsafe, and since it is being used, claim the right to control it for it is taking the place of brick and requires the skill of a mason to use it." The

attempts of the bricklayers and masons to control concrete were strenuously opposed by concrete manufacturers. One of their arguments in selling concrete was that it was not erected under union conditions. Unskilled labor, mostly unorganized, could erect it. Costs would be low and no jurisdictional disputes would delay the job. "No attempt to unionize unskilled labor has been successful to the present time," urged the leading engineering magazine in the country.[33] From the manufacturers' viewpoint, if the union succeeded in getting control over the installation of concrete, the strongest sales argument would vanish. The actual struggle in a number of building centers substantiated these fears.

The cement laborers had profited materially by the introduction of concrete, for it meant an increased demand for unskilled labor in the building trades. Soon, however, the use of concrete-mixing machinery, and later of the central mixing plant from which the material is carried to the walls and dumped into the forms to set, began to deprive unskilled workers of the advantages they thought were theirs. The laborers' union was then willing to come to the aid of the bricklayers.

By 1910, when the use of concrete was already well established, the union realized that it must change its attitude. Its new policy, one of encouragement to use concrete, is reflected in the *Bricklayer and Mason*, the official journal of the organization:

> Do we honestly want to control concrete? Can we secure that control? If we want to control concrete then we must advocate it as good staple material for surely we would not want to control a material and decry its value at the same time? [34]

(c) *Effect upon Other Mason Trades.* Irrespective of its new attitude, the union never succeeded in getting full control over concrete. While the bricklayers were wavering between a policy of opposition and one of endorsement, the cement finishers organized themselves into a separate union, the Brotherhood of Cement Workers, and claimed control of con-

crete in a number of cities. This resulted in jurisdictional disputes between the new union and the plasterers and the bricklayers. The stonemasons, affiliated with the bricklayers' union, were probably hardest hit, since concrete displaced more stonework than brickwork. Prior to the use of cement, foundations were of stone. Now concrete or cement blocks are more frequently used. Wherever the bricklayers' union controlled these blocks, they permitted the stonemasons to put in the foundations. Later, the union also permitted stonemasons to lay terra cotta, primarily to make up for the reduction in the amount of their work occasioned by the widespread use of concrete.[35] The plasterers' union soon began to dispute jurisdiction with the cement-workers' union over finishing concrete floors. "This work is only plastering work and shall be done by members of our union." But in a number of instances plasterers proved unable to do this work and the cement finishers maintained control for some time.[36] We have already mentioned that concrete is reinforced, in order to strengthen it, with iron, steel or wire. The placing of this material became a subject for contention between the Metal Lathers' Union and the Structural Ironworkers' Union. Costly jurisdictional wars were waged, which in many places are still on, in spite of numerous and weighty decisions awarding this work to one union or the other.

The development of stonecutting machinery led to a protracted struggle on the part of the stonecutters. The stone-planer, introduced about 1900, eliminated many of the skilled stonecutters who worked with chisel and hammer.[37] No consistent policy to control the machine could be launched by the national union, which was weak; for the local unions failed to coöperate. The displacement of skilled craftsmen by the stone-planer was further increased by the change in the location of the industry; the handwork supplementary to machine planing was transferred to the quarries. Nor were the displaced union workers used on the machine, for the union had opposed it. Em-

ployers remanned their plants with nonunion workers. Between 1900 and 1910 one half of the stonecutters in the United States were displaced by unskilled or semiskilled workers. The stonecutters' opposition to machinery came concurrently with the invention of the modern skyscraper. The terra cotta manufacturers were quick to take advantage of the new opportunities for the use of their product, which to them meant a large expansion.[38]

(d) *Effect upon Painters.* In most of the trades, occurred similar changes, only a few instances of which can be cited in this chapter. During the past two decades, the skill and the nature of the painters' craft have changed greatly. The leader of the painters' union in New York City described the situation in the following words:

> The painter has drifted, under the pressure of new building methods, from the highly skilled craftsmanship of the past to a semiskilled laborer. When painting was a real craft, the men served apprenticeship, attended schools of drawing and design, learned the nature of the pigments which are used in paints, studied the idea of the relation of color to paints and of color harmony. They had to know the nature of the different woods and the reaction of the various chemicals — for dyeing, finishing, etc.
>
> It is entirely different today. The painting business is a highly commercialized industry. Buildings comprising hundreds of rooms must be completed in 5 per cent of the time it took fifteen or twenty years ago. To meet that condition, the chemist has been brought into play. Employed by the paint manufacturer, he solves all the problems of the contractor concerning the application of paint. The painter's job is not to reason why; his is but the task of doing what the chemist and the contractor find it necessary to do.[39]

This change brought with it a temporary advantage to the skilled union painter. Speed, often the modern criterion of good work in the building trades, can be attained only by seasoned painters. A "greenhand" cannot acquire sufficient speed to satisfy the requirements of contractors. This protects the unions, to a very limited extent, against competition from unskilled painters.

A change in the kinds of buildings erected has offered partial relief to many skilled immigrant painters in the larger cities. These, either because of a high regard for their own skill or because of an inability to meet speed requirements, are, as a rule, unable to secure jobs on ordinary building operations. Recently, however, the coöperative apartment house has made its appearance. The painting in these buildings is done to suit the taste of the individual owner and not the price specification of the contractor. The contractor puts on only one preservative coat of paint in these apartments and the owner attends to the decorative painting. The older type of painters are recruited for this work, which requires the skill they possess and frees them from the strain of a high standard of production.

It is too early to predict the effect upon union policies of the paint-spray machine. Thus far, the union has opposed it on the basis of health. Some state legislation restricting its use has been enacted in territory where the union is strong. The spray is used extensively on rough work and, where the union does not control, for general painting. One operator with a spray gun can paint more square feet of surface than six or eight painters using hand brushes. There is some dispute as to the quality of the work done, but the spray is a great labor-saving device. Walls twelve feet high and ceilings can be painted without the use of scaffolding or ladders. If a single coat of paint is desired, the spray can apply it in any thickness. It can reach corners and crevices inaccessible to a brush. The painters' union is fully aware that it cannot permanently keep the paint spray out of the industry and, in many instances, is now consenting to use it with proper health precautions.

The introduction of new materials has affected this union also. Recently, a cream-colored glass, said to be more sanitary than marble and cheaper to install, was introduced as a substitute for the latter. The marble workers, who belong to the bricklayers' union, claimed the work because the material re-

placed marble. The glaziers, belonging to the painters' union, insisted that, irrespective of its use, the substitute was glass and belonged to them. Another jurisdictional fight resulted. The difference in wage rates between the glaziers and the marble workers naturally aligned the employers in favor of the latter, and postponed a settlement for some time.[40]

The plasterer's job and skill is threatened by the use of plaster board and the plastering machine. This "mechanical plasterer," which will put on as much brown or scratch coat as eight men, has long been in use on rough work and has, only recently, been tried on small building operations. The high wage rates of the plasterers have stimulated the improvement of this device.

(e) *Effect upon Seasonal Labor.* New materials have produced new specializations and new unions. This intensifies competition for work and makes the problem of reducing seasonal unemployment more difficult. The bricklayers seem thus far to be the safest from an encroachment of machinery, though new materials have at times threatened their craft. The carpenters seem to be safe, not because of the absence of changes, but because of the aggressive policy of the union, which claims any material that is taking the place of wood. "Once wood, it is always the right of the carpenter to install it no matter of what (*sic*) the material is."

Substitutes for stone and machinery to dress stone have made it very difficult for the stonemason to secure work at his craft. The Bricklayers', Masons' and Plasterers' Union met this condition by permitting the stonemason to lay bricks with an improver's card until he could qualify to join the bricklayers' union. The ironworkers fought almost every union in the building industry in order to maintain their right to erect and install all iron products. For a long time they were referred to as "pirates" who "stole" work belonging to other unions, although the history of their union does not justify the indictment.

In addition to changes in general methods of construction, special classes of workers have to contend with the introduction of new materials. The gas fitter is displaced by the electrical worker; the use of granolithic stone for staircases displaces the staircase hand, a specialist among joiners. Steel window frames instead of wooden sash, steel ceilings instead of plaster, metal lathing instead of wood, enamel and patent preparations instead of paint, all have their influence on the demand for particular kinds of labor.

Another large and important change, greatly affecting many of the trades, is the increasing amount of work done indoors and delivered to the job ready for installation. Woodwork, already referred to, structural ironwork and, to a considerable degree, plumbing, steam fitting and electrical wiring, are assembling trades whose work is no longer dependent on the weather factor. As we shall see below, factory production has had a decided influence in reducing the seasonality of the building industry. The unions have felt, however, that an increase in unemployment has in many instances resulted from materials being delivered to the job ready for installation. At times, in different localities, they have attempted to prevent this. The plumbers, for example, have for a number of years compelled workers in their trade to do certain tasks only on the job. In some localities the plasterers did not permit permanent plaster molds, but insisted that these be made on the job and destroyed after use.

(f) *Effect upon Specialization and Skill.* The net result of these changes has been an increase in the specialization of the labor groups, which augments seasonal unemployment and jurisdictional disputes and reduces skill. These conditions have led some unions to demand a more thorough training for apprentices. In Rochester, N. Y., and other places, mason apprentices must perfect themselves in bricklaying, stonemasonry and plastering, and they must work interchangeably at these branches. Thus, after completing the exterior brickwork,

some masons are brought inside to plaster, lay tile and so on. Though this practice, not yet of wide application, would reduce the amount of unemployment, it would also reduce the speed of each specialized operation. Employers, at the present time, are more concerned with speed than with having thoroughly trained workers.

This demand for speed has directly influenced the jurisdictional claims of the building-trades unions. Under union conditions, with each group organized into an exclusive craft union, the individual is restricted to a single trade. This specialization is simply the counterpart of the specialization in the employing branches of the industry, both directed toward an increase in efficiency. From this point of view, the greatly criticized jurisdictional rules of the unions are sometimes necessary for the industry's requirements of speed.[41]

While it is generally true, however, that the amount of handwork has been significantly reduced, and mechanical devices and specialization have tended to decrease the skill of the building craftsman, it must not be overlooked that some of the trades still possess a considerable degree of skill. Bricklaying and plastering, for example, are still highly skilled trades — and will probably remain so until mechanical devices can be substituted for their labor. This has already been partially accomplished in the case of the latter trade by means of the plaster gun. At the same time it must also be recognized that many workers in the trades today, although dependent largely on machinery, are more skilled than the handicraftsmen who have been displaced. It is obvious, for example, that a man working on a steam shovel is more skilled than the laborer with a hand shovel, and that the hoisting engineer who knows his machine thoroughly is more of a craftsman than the hodcarrier. The same might be said for the foremen and technicians of other trades.

(g) *Effect upon Efficiency.* Technical changes in materials, methods and processes have brought to the foreground the

question of efficiency. Soon after the war, the abnormal demand for building labor resulted in a significant decrease in the productivity of building-trades workers. They did not have to exert themselves to hold their jobs. This situation stirred up much discussion about the relationship between the restrictive trade-union policies and efficiency. Unfortunately, much of this discussion is based on mere guess and hearsay. Changes in methods and materials have been so rapid that no standard of efficiency can be ascertained. During recent years the larger contracting organizations have made specific job studies for such purposes, but as yet there are little comparative data available.

We see how closely the technical revolution in building construction is interwoven with the position which the various trades occupy, with the methods they pursue and with their industrial demands. Not only are jurisdictional disputes intensified by the constant shifting of trade boundaries, but other problems of equal significance arise. While certain technical improvements have made a longer building season possible, others, leading to specialization, reduce the amount of work for each trade and make rigid jurisdictional definitions necessary. Restrictive rules relating to unemployment must therefore be reinterpreted.

For a majority of the building-trades unions, the monopoly of skill is slowly becoming of less significance. Jurisdictional definitions and the closed shop are largely protecting them against dispossession by semiskilled workers from without the union. The threat of the helper and the "greenhand" is a much greater menace today than in the past. The decreased skill generally required of the modern building worker places a new interpretation on the question of apprentice training.

(h) *Effect upon Employing Groups.* But technical changes, new processes and new materials have affected not only the organizations of workers, but also the organizations of employers. The functions and bargaining power of the different

groups on the employing side of the industry have also largely been altered as a result of this technical revolution. Specialization has taken away from the old-time master builder the control over all the operations. The constant invention of new materials has brought in a host of specialist subcontractors who, in turn, have created other problems. Specialization has presented to the employer the same type of problem as to the worker. Here, also, it has intensified competition with its accompanying waste and disorganization.

The significance of the problems presented in this chapter is not that they are beyond solution, but that they are of comparatively recent origin and that the industry has made only a beginning in their solution.

CHAPTER III

COMPETITION FOR JOBS—THE BUILDING BUSINESS

WE HAVE seen how the technical development of the building industry has totally revolutionized the methods and processes of construction in the past quarter-century and how these changes have reacted on many of the issues arising in labor relations. The various groups of employers have also been vitally affected. A handicraft technique did not call for the methods of modern business organizations. Changes in technical methods necessarily produced alterations in the type of business organization of the industry, with accompanying changes in the methods, practices and functions of the different groups. The competitive structure has slowly been modified by these newer developments.

1. The Building Industry and Other Industries Contrasted

The building of houses, office buildings and factories is carried on under a system known as contracting. The dissimilarities between contracting and other lines of business are many, and a distinction must be made in order to understand why policies accepted in other industries are inapplicable to the building industry. Especially does it differ from other industries in the character of its management and in its local nature. Manufacturing work is generally carried on inside a structure of a definite area, whereas construction work is constantly moving from one location to another. The labor force in a factory is there for a relatively permanent term of employment. The labor employed by a contractor is there until it completes the particular work of that trade, when it leaves for another job or for another employer on a different project. It

may in the future return to the same contractor, but here also, it is only for a short time, — at most, a few months. The larger construction firms maintain a more or less permanent force of skilled men, but this is only a very small percentage of the total labor force which they employ during the building season. The average contractor has no opportunity to build up any degree of loyalty among these migratory workers. Their interests are not tied up with one contractor.

The degree of labor turnover in this industry does not permit an employer to develop the same feeling of responsibility toward his shifting group of workers as he might toward a permanent personnel. An inquiry made on the question of labor turnover by Secretary Hoover's Committee on Waste in Industry points out, for example, that "one man, in the course of five and one-half years, worked for seventy-six different contractors and was hired 108 times." [1] Moreover, a contractor working in different localities with local labor is not so likely to be amenable to public opinion as he would be if he had a permanent location.

Material deliveries in the building industry present a more difficult problem than material deliveries for manufacturing establishments. The factories may have sufficient storage space to prepare for delays. The bulkiness of building materials precludes such storage space. Weather conditions present many other obvious problems. Finally, the seasonal character of the industry, which means disorganization of the entire labor force during the off season and carrying overhead charges without business, results in many forms of waste and chaos.

These conditions as a rule hinder contractors from adopting a definite "labor policy" and present problems totally different from those which face the manufacturer. Both, it is true, have a "labor problem" and similar problems of management, but the housed industry has a much simpler task and can apply more effective remedies.

2. Groups in the Building Business

The groups which have important functions in the conduct of the building business are owners, architects, general contractors, subcontractors, material dealers, equipment manufacturers and dealers, financiers and labor. There are two classes of owners; the first is the one who owns the building after it is completed, and the second is the operative, or, as he is sometimes called, the "speculative," builder who sells the structure upon completion. Most builders submit their projects to an architect who draws up plans and specifications. Operative builders, however, usually dispense with such services and rely on the commercial architectural agencies for whatever technical information they require. After specifications are completed, the general contractor is selected from among those submitting bids. On large operations, the general contractor usually sublets most of the work to subcontractors, also through a bidding system. Behind these factors are the financial institutions which supply capital for the major portion of these operations.

(a) *The Owner.* The most important single agent in the building industry is the owner. His demand determines the kind and size of building and the time when it is to be begun and finished. His insistence that a structure be completed on a definite date is responsible for many wasteful competitive practices. The contractor can do little to correct bad policies, nor can he hold out against the exorbitant demands of labor or other groups, when he is confronted by the owner's insistence for a completed structure at a specified time, usually determined without much consideration for possible contingencies.

The builder of moderate-sized residences and small apartment houses, who is most familiar to the average person, is generally of small consequence in the large city. A major proportion of all buildings there are constructed by the operative builder. The latter is unlike a contractor, and his interest in

building differs from that of contractors generally. The general contractor possesses a large organization, plant facilities and a small but permanent labor force. Most operative builders have none of these. They work through subcontractors. There are some who have a construction plant similar to that maintained by a general contractor, but they are the exception rather than the rule. Usually they are only indirectly interested in the problems confronting the building industry.

A man with small resources may secure a loan and rush up a building, but the high interest charges on heavy unproductive investments lead him to use any method which will speed up construction and at the same time cut down its cost. Letting the work directly to a subcontractor in each trade is one of the best ways to cut costs. Subcontractors work in a highly competitive field and are willing to figure closely for the sake of getting a job. Some of the practices they resort to in order to avoid a financial loss will be described later.

The operative builder is probably not as great a danger to the stability of the industry at the present time as during the middle of the last century. Then, the "legitimate" contractors were not organized and labor had little control over working conditions. It was during this period that many obnoxious practices originated which have since dragged down the ethics of the industry to a low level, making many of the restrictive union rules necessary. The general contractor of that day looked upon the speculative builder with disdain, for, in many cases, the latter possessed little technical knowledge, and no skill or ability. He was only a small business man who had made a good buy in real estate. His success or failure depended to a large extent on his ability to hire the right subcontractors at the "right" price, on his ability to purchase the materials in the most advantageous market, and on his ability to supervise the job so that the whole organization of thirty or more trades would work in unison, according to the schedule which would complete the building on time. This very important executive

function has not always been in the hands of those best able to perform it.

The aloofness between the operative builder and the general contractor continues to some extent even to the present day. In New York City, for instance, a large majority of the operative builders are not members of the Building Trades Employers' Association. Neither are the subcontractors hired by these builders members of their trade associations. This absence of affiliation means that during crucial times they do not lend the necessary support to the programs and policies of the organized contractors.

There are a number of reasons why the operative builder cannot support the contractors in their labor policies. In the first place, he has much to lose and little to gain by obligating himself to principles, rules or set policies. Although the recent development of "codes of ethics" helps to "keep him in line," the nature of his business demands that he be a free lance — an opportunist — to follow whichever policy will enhance his fortune at a particular time. He is engaged in an industry which demands a finished product on a specified date on pain of bankruptcy and financial ruin.[2] In certain respects, the general contractor is under the same pressure from the owner, but a strike clause in his contract more often protects him against loss, and the pressure becomes other than financial.

The operative builder cannot afford to subject himself to discipline. He is not directly interested in any theory of labor relations such as the closed or open shop. The employment of labor is incidental to his business. His position in the industry, however, has a vital influence on the bargaining power of labor. He is usually the union's mainstay during a strike. His position is so vulnerable that, irrespective of the stand taken by contractors, he must soon capitulate to the union demands. The result is that labor has employment with the operative builder during a strike against organized contractors. Strike assessments are collected from those working, relieving finan-

cial pressure for a settlement. Often such aid tides the union through the slow season. Then the balance is automatically thrown in its favor by the pressure of work during the busy season. As a matter of fact, in many instances, the union counts on the operative builder and "independent" contractor to pull it through a difficulty.

The private owner can exert little influence on the problems facing the building industry. While in the aggregate the volume of residential construction is about two-fifths of the total building program, the owners are seldom organized or in a position to make their wants felt by other groups. At best, a buyer's strike is their only weapon; but the necessity for housing facilities precludes success for this method. The more financially able owner, building for business purposes, can exert a favorable influence by placing his order at a time when price and employment levels are able to meet it. On the whole, however, the operative builder has a more potent influence on the problems of the industry; the extent and character of his operations affect directly the bargaining power and practices of labor and employers.

While many of the so-called "shoe-string operators" attracted to the real estate field by promise of a large and quick reward, are undesirable in so far as their methods are unethical and uneconomical, one must concede that many operative builders are socially minded men of high calibre, and that their advent into the real estate field has built up needed urban communities neglected by the more conservative investors. Recently, the movement for improved business methods has affected this group also, and in many localities operative builders are organizing for coöperative purposes, often joining with other building-trades associations. Poorly managed surety bonding companies, through their methods of financing the operative builder, have been in part responsible for the development of sharp practices. The stronger companies, however, sometimes supervise all design, material and con-

struction work, and set a high quality standard in building construction.

(b) *The Architect.* The architect occupies an important position in the building industry. Through his contact with the owner he can do much to plan operations so as not to exert undue pressure on labor supply in the busy season, and to restrict the kind of contractor who shall be allowed to compete, thus excluding the incompetent. The practice of architecture in this country has evolved with the growth and complexity of modern building operations. Years ago the types of building often constructed did not require an architect. Many so-called architects were "graduated" carpenters and masons, sufficiently familiar with the details of planning and designing. But new processes in the manufacture of iron, steel, terra cotta, brick and cement have made new forms of construction possible. The architect's work on a modern commercial building is no longer limited to making it beautiful in design and substantial in construction. He has to go further and be able to equip it with a complicated system of mechanical and electrical apparatus, and to provide for a network of pipes, flues, wires, high-pressure boilers, steam engines, dynamos, elevator pumps, tanks, electric elevators, ventilating fans, refrigerating plants and mechanical kitchen and laundry facilities.

It must be remembered that these changes are of comparatively recent origin. Sixty years ago the steam engine was not in general use in buildings and there was no source of mechanical power for them. Heating and ventilating were supplied chiefly by open fireplaces and stoves; elevators, electric wiring, dynamos and motors were not perfected; and plumbing consisted of a cold water supply, a drainpipe for two or three sinks and limited sanitary facilities. The architect of the modern large city building must know something of mechanical, electrical and sanitary engineering.

The recognition of his importance as a factor in the building industry came very slowly. Many architects were trained in

little else than drawing, and lacked contact with business problems. Only the foreign-trained men had the confidence of the building public. Not until after 1880 did American schools begin to teach architecture. At the present time registration laws in many states stipulate graduation from a recognized college of architecture, or ability to pass special state examinations together with some experience in an architect's office. Such legislation is every year more widespread, and its provisions more stringent.[3]

The architect has three principal duties. He designs buildings and makes drawings and specifications; moreover, he may be employed to obtain tenders from contractors and arrange the letting of contracts; also to secure proper execution of the work, and certify as to the amount due the contractor from time to time. A more recent development in the larger cities is in the direction of specialization. Where the building is complicated, the architect often shares the work of drawing up plans and specifications with various types of engineers. In the smaller cities the general contractor frequently attempts to displace the architect by himself supplying such services as the professional man would.[4] The engineer and architect in a few instances are combining their professional work with the business of superintending the job, thereby eliminating the general contractor entirely. Often they even eliminate some of the subcontracting by hiring labor directly, for some of the less important branches of the trade. There is no hard and fast rule defining the jurisdiction of the architect and there are many infringements on what he considers to be his function. In the days preceding the war it was estimated that almost ninety per cent of all buildings were erected without the professional aid of the architect.[5]

The professional position which he occupies has often given the architect an opportunity to be a leader in placing the industry upon a higher level of ethics. But the clannishness of the group kept them isolated from the rest of the industry until

the recent war. Since the war they have been active, both through their professional organizations and as individuals, in many coöperative endeavors to improve competitive practices. Of particular significance has been the architect's interest in improving the quality of construction, in having craftsmanship receive recognition, in reducing seasonal unemployment, in stabilizing the relations among the several groups in the industry, and in reducing waste and duplication of effort in building construction.[6]

(c) *The Contractor.* The third factor in the sequence of building construction is the general contractor.[7] Several decades ago any building mechanic possessing a rudimentary knowledge of his trade, and ability to read specifications, could become a contractor. In fact, "fifty years ago contracting was not considered a gentleman's vocation." [8] The contractor, as a rule, had no office and kept no written records. The methods of carrying on the work were simple; work was done mostly by hand, requiring moderate skill and little specialization. Often the contractor was himself a jack-of-all-trades, versatile in all work from the digging of the foundation to papering the walls. Industry was largely local and contact with the owner direct.

At the present time many general contractors are regarded primarily as "brokers," signing up a general contract and then parceling out the work among subcontractors who actually perform it. This type of general contractor does not himself possess the technical knowledge necessary for building construction. He has an office and telephone, but no staff, and his capital is very small. He does little estimating. By simply compiling the figures of the subcontractors and adding his own profit or "overhead," he is able to submit a bid at almost no cost. Such a general contractor, and he is not an uncommon type, may know little about labor conditions, or the methods used by his subcontractors, about their costs, capacity, resources and ability to obtain raw materials, or about other factors which might adversely affect his contract, particularly

with respect to completion of his task on the date due. Even in the capacity of a supervisor or coördinator, he may be incompetent because he lacks this knowledge.

The advent of steel and concrete and the continued complexity of construction processes have resulted in the development of a new kind of general contractor. He is an individual whose qualifications for success, aside from a practical knowledge of building operations, are organizing ability and engineering training. Construction companies guided by this type of manager are fully equipped to render a complete service, from architectural design to decorating and furnishing. Their centralized control facilitates uniform speed in every line of work. Such organizations perform a large percentage of the work directly and retain the right to supervise whatever work is sublet, as well as the further right, in the case of delay, to take the work out of the subcontractor's hands and adopt such measures for its completion as may be necessary and expedient. To do all this, the modern building construction organization may function through a departmentalized system. Through a promotion, drafting, estimating, accounting, purchasing, expediting and construction department, it may adopt factory methods for many processes and introduce more efficient procedure into the building industry.[9]

Conducted on this basis, building construction can be carried on under the best methods, taking advantage of the latest improvements in machinery. One has but to contrast the methods of purchasing materials used by a large company with those of the ordinary small contractor to appreciate the possibilities for improvement. The former has a special purchasing department whose particular task it is to buy all materials and through its expediting division to follow up all deliveries so that delays may be minimized. The smaller contractor leaves this important task to the superintendent, who must also attend to other duties, such as those connected with production schedules and labor problems. No study has been

made of the amount of time lost by workmen through failure in material deliveries, but from the meager evidence available it seems to be tremendous. With the same modern scientific organization in charge of construction, the contrast between its operations and those of the "broker" contractor becomes more striking.

However, there are only a small number of such building organizations in existence, although the trend is apparently in that direction.[10] For the most part, contractors cling tenaciously to old methods, perhaps because the brokerage plan of building is profitable, and easier than establishing an organization which can supply all the necessary services.

(d) *The Subcontractor.* The industry is far too complex to be completely comprehended by a single contractor. The many branches of the masonry, structural-steel, woodwork, decorating and mechanical trades all have their own peculiar techniques. A general contractor must seek the service of specialists — subcontractors. He may employ thirty or more on a single building, all working under his direction. It is not uncommon for as many as five subcontractors to do the masonry work on the building. One does the foundation; a second, only the face brick; a third, the fireproofing; a fourth, the stonework; and so on. The process of subdivision is carried to the same degree in other trades. By such an arrangement, the general contractor is assured of skilled service when required, and yet is relieved of the obligation of carrying a huge, unwieldy organization through the lean seasons customary in the business.

It has been questioned whether the industry needs the continued division and subdivision of the labor of the supervising groups and whether it can support all these "overhead" charges. One organization supplying all the services would be too cumbersome. Speed, the most persistent demand of modern industry, requires a division of work into many trades, that each part may be executed efficiently and expeditiously.

The subcontracting system fulfills this function. It also performs other services. Storage space for materials is divided among many subcontractors. Each one has his own labor force and largely handles his own labor problems. He buys his own materials, a task which often requires intimate knowledge and experience. This is especially true of plumbing, heating and electrical work, where in each instance hundreds of articles have to be procured and installed, each one particularly specified or adapted for the work being done. In addition, the constant repetition of similar work develops a force of skilled workers.

However, those who deplore the extent to which specialization has been carried point out that the cost is materially increased by employing so many contractors. Each secures his own profit and the general contractor adds his to the grand total. The solution for this difficulty, they indicate, lies in decreasing the number of subcontractors. The tendency, however, does not appear to be in that direction. On the contrary, in spite of the increasing importance of the large construction organization, technical changes in the industry produce a greater degree of specialization. Not only is the work parceled out among more subcontracting trades than in the past, but many of the largest and most reliable general contractors now own no plant, but rent all necessary equipment from equipment-rental companies. In most cases, specialization is desirable since each group performs a real function with greater efficiency than would be the case if specialization were restricted. That each subcontractor secures a profit does not necessarily mean that the sum total of all the profits is larger than the small profit that would be taken by a single contractor performing the several functions.

The unions on a number of occasions have attempted to prevent the extension of subcontracting.[11] Their theory is that too many specialists increase the difficulty of enforcing union standards. The unions, as will be more fully explained

elsewhere, find the small, unstable, irresponsible contractor more difficult to control than the stronger general contractor who has a larger stake in the industry. Problems of labor necessarily are approached differently by organizations like the Thompson Starrett Company and the George A. Fuller Company than by small contractors who have no system and no organization. To the presence of the latter are traceable many of the economically unsound practices and restrictions found in the industry. The type of competition these have developed compels the unions to set up counter practices, in order to protect the conditions under which they work. Significantly, the large construction company has less complaint against trade-union restrictions than has the small contractor.

The position of the subcontractor in the industry is not an easy one. One of his chief problems is labor. Unstable labor conditions, especially in regard to wages, often mean hard times for him. His competitive price is based on the hope of favorable action or, at least, of not unfavorable action on the part of material dealers, labor unions, trade associations and other factors such as weather, which would affect him. When any such expectations are not fulfilled, he loses.

The whole contracting system is assailed as costly. The reforms proposed at various times aim to control competition, to reduce the number of subcontracting groups, or, by hiring labor directly, to eliminate the general contractor and subcontractors. Many architects are experimenting in building without them. Government construction is carried on in many localities under the "day labor" system. The state highway official or the city engineer either hires the labor directly or lets the work out to subcontractors. There are several advantages in such a method. It gives the governing body greater responsibility and elasticity in carrying on the work. It keeps contractors out of politics, and transfers their function to a public employe, without extra remuneration. Associations of general and subcontractors oppose the spread of the "day

labor" method of construction, contending that it is more costly than other methods and less efficient.[12] It is estimated that of the two billion dollars spent annually for government construction work of various kinds about twenty-five per cent is carried on under the "day labor" method.[13]

(e) *Financing Building Projects.* The building industry, perhaps more than any other, is financed largely by credit. While some private owners may have enough savings to pay for a house, and some corporations may erect new structures out of surplus funds, most building projects from inception to completion are to a very large extent financed on a credit basis. The capital available for investment in buildings comes from several sources. The most important of these are building and loan associations, life insurance companies, savings banks, trust companies, national banks, mortgage companies, private investors and surety companies.

For home financing the building and loan association occupies a prominent place. There are nearly 13,000 of these institutions in the country, offering savings and loan opportunities to more than 11,000,000 members. In 1926 alone these associations loaned more than $1,500,000,000 and their total outstanding loans in that year amounted to $5,852,891,511. The long-term loans made by these associations, often for periods as long as twelve years, and the willingness to lend on the basis of two-thirds or more of the full market value of the property, have made this agency particularly serviceable to the small investor who has 25 to 40 per cent of the amount needed to buy or build a home.

Life insurance companies generally are conservative investors. They are under state regulation and must limit their real estate loans in accordance with legal requirements, usually to about 65 per cent of a conservative valuation of the land and improvements. Prior to the war most of the larger companies preferred to invest their funds in mortgages on large commercial structures. The housing shortage resulting from the

war and the need for broader channels of investment led many of these companies to enter the home-loan field. These loans are placed through local agents — banks, trust companies, mortgage companies and individuals trained in the work, and are usually limited to 50 or 55 per cent, or thereabouts, of the cost of the property to the purchaser. But, since the loans made by insurance companies run for periods as long as fifteen years, the borrower is able to repay, as a rule, without the necessity of renewing. In December, 1927, the real estate investments of insurance companies reached the high figure of $3,717,000,000.

The savings banks, trust companies and national banks are heavy investors in mortgages on homes. In making real estate investments these banks are generally restricted by laws which limit their loans to a certain percentage of the property value. In some states this maximum is 50 per cent; in others as high as 60 per cent. But the amount loaned depends partly on whether the appraising methods of a particular bank are liberal or conservative. The savings bank loans usually run for relatively short terms — for periods of one, three or five years. This is due to the difficulty frequently experienced of converting mortgage investments into cash in case the institution needs the funds. Trust companies, in addition to large savings deposits, have trust funds which are available for real estate loans. National banks have not been heavy investors in real estate, because of restrictive Federal laws, but their large savings deposits and the 1927 law which permits them to invest as much as one-half of their savings deposits in realty loans have led to an expansion of their real estate investment in recent years. The more than 27,000 national banks in 1927 invested in real estate loans $5,473,175,000.

In the large communities mortgage companies lending on first or second mortgages, and private investors, are important factors in building-financing. These are less restricted by legal regulations than banks and insurance companies and the use

of their funds is left more to their own discretion. The more conservative and reliable mortgage companies do not usually lend in excess of 50 per cent of the appraised value of the building, but many place the maximum percentage at seventy-five. In 1926 mortgage companies issued bonds worth more than $350,000,000; in 1925 the amount was $400,000,000; and in 1924 about $220,000,000. The private investor is even less restricted in his operations than the mortgage company, and the extent of his investment in real estate mortgages is known to be considerable.

In addition to these private agencies, state and municipal bonds, of which $1,350,000,000 were floated in 1926, finance each year the construction of roads and other public works. Much of this money finds its way into the building trades. In 1925 alone, $930,000,000 was spent from this source by the states and cities having more than 30,000 population.[14]

The importance of credit institutions as instruments for stabilizing the building industry has only recently been recognized. The reliable bond houses and insurance companies particularly have already exerted a strong influence in the interest of quality and the elimination of incompetent contractors. Not infrequently, the reliable financial institutions endeavor to build up an architectural, engineering and real estate department whose object is to safeguard against unsound building in every possible way. These often specify the subcontractors to be employed and the materials to be used in the structure. Great possibilities are here present to control many unstable factors existing in the industry. In 1923, for instance, the bankers were able to reduce the possibilities of over-inflation of building by refusing to loan on speculative projects. An earlier instance occurred in August, 1906, when the title insurance companies agreed among themselves to check tenement-house construction in New York for one year. Within three months after the decision, there was a drop of nearly twenty million dollars in building permits.[15]

One must not overlook, however, the possible consequences of an increase in the financial control of the building industry. The financiers' interest in building is at best indirect and differs from that of the workers and employers. In the recent movement toward an inclusive industrial organization which resulted in the American Construction Council, it was tacitly admitted that without the coöperation of the financial element such an organization would be helpless. Of greater significance is its possible influence on labor. Union leaders claim that in a number of important labor struggles during the past few years, the support which employers have received from financial institutions has resulted in their victory. This was particularly evident in the 1921 upheaval in San Francisco. This partisanship is not, however, inherent in the situation. While some financial houses may strengthen the hands of employers, others may help the cause of labor; the pressure of a financial house which is underwriting bonds on a new building is in the direction of getting the building finished as soon as possible; consequently they are likely to bring pressure on the employer to avoid causes of labor trouble developing.

Financial control may also circumscribe the industry's progress. During the depression in 1921, and the years immediately preceding, it was generally recognized that the interest and commission rates charged by the New York financial institutions were so exorbitant that they seriously impeded building operations. The Comptroller of Currency secured a statement under oath from national banks in New York City to the effect that between October 1, 1919 and August 1, 1920, they made more than 4000 loans at rates of 15, 20, 25 and 30 per cent per year and that the amount of these loans included only a portion made during that period by three of the largest banks, which aggregated $600,000,000.[16] The cost of financing the average building is already excessive and accounts in no small degree for the high cost of housing.[17]

(f) *Bonding and Surety Companies.* To protect the investment of the owner while the building is in process of construction, and to assure him that it will be completed on the date specified in the contract, builders are required to protect their risk with insurance. This is provided by surety and bonding companies, which, while performing a necessary and constructive service, are also partly responsible for some of the competitive evils in the industry. Many of these companies bond contractors of questionable ability or ethics, and, therefore, subject the more reliable and competent firms to an unfair type of competition. It is frequently said that most contractors will eventually "go broke" if given enough time. Many of them are able to exist chiefly because bonding companies or similar institutions finance them. Intense competition among these leads to lax investigation of the contractor or the project. Bonds are issued to builders who either are totally unable to complete a contract or could do so only under conditions which would make them a competitive menace to the others in the industry.

The mere fact that an owner requires a bond from a contractor is in itself an indication that he doubts the latter's ability and integrity. The important reason for the builder's being bonded is his questionable character, rather than insurance against contingencies. The obvious step, of course, is to employ a competent contractor and not to rely on a bond as a source of confidence. The losses of surety companies would seem to be sufficient inducement to make them restrict their issuance of bonds, to responsible builders. In 1923 one company had 1790 defaults involving claims of $1,701,000.[18]

The remedy lies in admitting to competition only those who can measure up to the best standards. Where large building projects are involved, owners and architects often award their contracts directly to a responsible general contractor without competition of bids, relying solely on his past record. At a hearing on the practices of surety bond companies in New

York City, it was stated that architects on private building projects involving millions of dollars required no surety bonds from contractors, because the latter were chosen on the basis of ability and integrity. An architect prominent in the city stated that his firm was "as capable as a surety company in arriving at a correct estimate of the contractor's responsibility," and regarded a bond as "unessential to wise business procedure. A bond invites a lawsuit." [19]

The New York State architect estimated that the state was losing millions of dollars every year through the "lowest bid" system. He believed that if the state laws would permit him to give consideration to the competency and responsibility of the contractor in making awards, the quality of construction would be improved and much money saved. The contracting groups, under the leadership of the various national trade associations, are trying to induce surety companies to limit competition to those contractors who have adequate experience, adequate financial resources, and adequate plant and equipment to fulfill a contract.

3. Waste Due to Competitive Practices

The competitive system as it operates in the building industry produces a number of wasteful practices and customs, more responsible than any concerted effort to fix prices for the high costs of housing. Other industries enjoy closely knit organizations designed to correct uneconomic practices and to regulate competition. But in the building industry such organizations are of more recent origin and are only now beginning to make noticeable headway.

What forms has competition taken? What practices did the industry develop? How have they affected the position of the different groups with reference to labor relations and stability? What have been the consequences of these practices and what program is proposed for their improvement? Competition often gives the building owner a product of question-

able quality. Periodically, the public suffers a housing shortage or a "rent war." Nor is this type of competition to the best interests of the employers and managers themselves.

(a) *The Method of Bidding in the Industry.* Many general contractors and a large number of subcontractors are inadequately equipped and trained to make a detailed cost study of a prospective job. The method of securing bids and estimates is partly responsible for the chaos in the industry. After estimating quantities according to the specifications, the contractor fixes prices per unit of the various quantities. Here is a wide divergence between a manufacturing industry and contracting. In the former, the cost may more often be determined accurately and readily through comparison, especially in cases where a product is duplicated over and over again, under almost precisely similar conditions. The contractor, however, in estimating cost cannot tell with accuracy what it will be, because his conditions of production are seldom exactly the same.

A general contractor determines his cost by submitting the project to several subcontractors for their bids. These in turn frequently repeat the process by asking bids from sub-subcontractors, who, after securing figures from the material dealers, add their estimate of labor cost and of their overhead. As one contractor put it: "I have been the subcontractor of a sub who subbed from the subcontractor of the general contractor." [20] If a project involves twenty-five trades (which, in the larger cities, is not an uncommon number) and six general contractors are angling for it, from 200 to 300 firms may contribute to the preliminary estimate. The figures secured in this haphazard manner are then submitted to the general contractor, who totals them, adds his own overhead and profit and then submits the final figure to the architect as his price for the job.

The builder doing competitive work estimates on ten jobs, on an average, before he gets one. The usual cost of an esti-

mate is about $75. Thus, an outlay of $750 must be made before a contract is secured, $675 of which is added to the builder's overhead, chargeable to the job he does get. Some contractors refuse to estimate on competitive work, depending for business on their recognized reputations. Others bid only when there is a good chance that the job will be secured. Still others will bid on any job offered. Mr. L. K. Comstock of the New York Building Congress gives a few instances of relatively large projects having excessive overhead costs, due to the bidding system.[21]

A certain project not long ago was being figured by a contractor in one trade alone. The prescribed bid form was not complete until 204 separate prices were quoted, and the other trades were similarly treated, though generally not so badly.

A 3500 room hotel was recently planned. Seven general contractors offered bids. More than 325 firms participated in the making of the seven general bids, at a cost to the industry of $150,000. This figure is much too low rather than too high. The project was promptly abandoned after the figures had been received.

There took place recently an architectural competition for a large building of a semi-public character. Three hundred and fifty architects competed. Each set of drawings submitted cost at least $2000 and a few cost as much as $8000. If the competitive drawings averaged $3000 each set, then this building imposed an overhead charge on the industry of $1,050,000 before the architect was even selected.

Not so long ago a competition was held for a building construction operation, relatively small, but apparently attractive since 17 bidders competed. The work was let to one of the 17 for $200,000. After the announcement of the award the 17 bidders gathered about a table for mutual condolences and refreshments. Someone suggested that each one put down on a piece of paper his total cost of estimating up to the moment. The suggestion was acted upon. The result showed that the estimating costs of the 17 firms amounted to $45,000. This was 22½ per cent of the price of the job.

The Building Trades Employers' Association of New York City estimates that for every million dollars' worth of building construction in New York City there is expended by contrac-

tors and subcontractors about $30,300, or over three per cent, before construction can begin. If this overhead were the only loss, the situation could be improved more easily. But the bids themselves are haphazard results of individual estimates.[22] "I got that contract because I made a mistake; I left out a floor," is the way a contractor described one situation. The following bids, submitted on a project involving but one kind of work, show the amazing variation in the estimated cost of doing that work.[23]

Bidder	Estimated cost
A	$9,851
B	18,295
C	23,641
D	2,897
E	29,400

The estimates for electrical work in a ten-story hospital showed a 40 per cent range, from $24,995 to $34,828. The labor-cost item alone ranged from $5470 to $11,002.[24] On another building a bid for lighting fixtures ranged from $5584 to $9500, or a 70 per cent difference.[25] While estimates varying as widely as these are rather common, one must also bear in mind that instances are not rare where the low and high bids are separated by only a few dollars.

An engineer of many years' experience and a leader in the constructive movements in the industry concludes:

> Indiscriminate bidding for work in the building industry brought about a loading of the industry with a charge wholly disproportionate to the beneficial results obtained. It fostered a ferocity of competition which has unquestionably lowered the quality of the work and has been largely instrumental in destroying craftsmanship. Few people in the building industry realize the extent to which this unbridled competition has undermined the business. Few people realize that competition unchecked has loaded the business with a crushing weight of overhead charges; compelled the substitution of inferior for superior quality, has destroyed craftsmanship and has converted the business into a speculation.[26]

Contractors, like many manufacturers, are short sellers and short buyers at the same time. They sell today for future delivery. Many conditions may arise which may make their sale a loss. Their short selling is not only in relation to the owner but to every transaction which they make. They buy material at the market price, but they estimated its cost at the price which was current at the time the plans were made; they estimated labor cost in the same fashion, unable to foretell whether the rates were going up. (Rates seldom go down in the building industry.) They allow for a few contingencies, but there are always a number of others which they do not take into consideration, each contractor fearing to lose his chance of being the low bidder. Only the better established and more reliable contracting companies make allowances for price trends in preparing their estimates.

On the surface it appears that competition ought to force the price down to the lowest point consistent with business methods. However, two evils prevalent in the industry interfere, making the resulting competition cutthroat in nature. The first is the practice of "peddling" or "shopping" bids, and the other is price cutting. An illustration will serve to explain the former practice. Several contractors (selected, in many instances, by the architect without reference to their competency), bid on a project and receive sub-bids. The bidder to whom the contract is awarded then gives two or three of the subcontractors an "opportunity" to revise their figures. They all reduce their estimates. Then he gives the lowest bidder still another opportunity to revise his bid if he wants the job. When architects and owners force or urge general contractors to "shop" sub-bids, they lose the benefits of unified coöperation.

General contractors who "shop" among subcontractors cause the latter to drop all their coöperative spirit. Subcontractors who have been shopped tend to refrain from putting in their lowest bid first to general contractors, adding a sum for the "cut." [27]

If the contractor is forced by economic conditions and bid peddling to accept a figure too low to meet his own costs, it is obvious that he will have to make up his loss in some other way. He cannot recover it on the next job, for he may have to go through the same procedure of "price cutting" on that one also. His solution is to cheat the contract requirements, by shirking quality and quantity specifications. Not infrequently, where steel frames are used, the contractor "forgets," under such competition, to paint the beams according to the specifications. No one will know that the coating is missing, when the steel is covered with masonry or concrete. The floor base is made of packing-case boards instead of new wood. Bricks are set up without any fireproofing material in the wall, and semi-plate glass is used where plate glass is called for.

The whole system of speculative building tends in the same direction. Detection is not always possible. Moreover, the present owner will soon sell the structure and pass the risk on to someone else. And if he does not sell, then within fifteen or twenty years the building will be razed to make room for a more modern structure. So why enforce standards of quality? Real estate operators and other investors in buildings encourage the erection of the "cheapest thing that will hold together for fifteen years."

> When the amortization charges must be based on so short a period as this, and with land taxes constantly increasing, it becomes obvious that construction must be based upon a cubic foot valuation that prohibits the use of any but the cheapest materials and methods.[28]

Under this pressure not only are quality standards scrapped, but union rules as to hours, wages and working conditions are also infringed upon, to reduce the loss on the contract.

Unchecked competition, as we have known it throughout the post-war period, has constantly driven the standards of work and craftsmanship downward. It puts a premium on astuteness and disloyalty, rather than on engineering skill,

craftsmanship and efficiency on the contractor's part. Some argue that he needs the stimulus of a speculative profit to develop initiative, ingenuity and speed. But for a large number of construction projects, price and not quality has become the standard today, and in the long run "the high cost of cheapness piles up a tremendous repair bill."

The implications of the system of price competition as it exists in the building industry lead one to recognize the purpose of combinations between contractors and labor. Under compulsion to beat down prices, the subcontractor and material man must exploit labor, or get together with it for mutual protection. Contractors' associations assuming price fixing functions were really protective associations. By providing that all bids should be filed through the organization and posted for all to see, they tried to make competition open and above board and eliminate price cutting and bid peddling. The attacks made on these combinations in the Lockwood Committee hearings in New York City, while in accord with governmental policy, showed lack of understanding of the economics of the industry, and diverted the attention of the committee and the public to the prosecution of individual law-violators when what was needed was comprehension of the underlying evils of the industry. In several subsequent instances, moreover, coöperative activities were discouraged through the fear that such efforts might be construed as illegal.

(b) *Remedies for Evils in the Bidding System.* A number of solutions are proposed to eliminate the evils of competitive bidding. The strongest obstacle is the stubbornness and persistence of contractors in adhering to the old methods, which, irrespective of their cost and waste, have been successful in the past. Three practical solutions are offered: a charge for estimates, the quantity-survey system of estimating, and the percentage contract.

(1) *Charge for estimates.* If the owner had to pay for the cost of making estimates, he would limit his choice of contractors to those whom he considered reliable and competent. This would immediately eliminate a great many irresponsible contractors from the industry. Moreover, the "overhead" costs would include only the cost of estimating on the man's own building, whereas under present conditions he pays also the cost of estimating on nine or ten other contracts which the builder did not get.

(2) *The Quantity survey.* The second remedy proposed for eliminating waste and uncertainty in estimating is the quantity survey. It is really a central bureau, where all quantities of the various items of material going into a building are computed. The bureau makes one estimate for each job in place of the eight or ten that would otherwise come in from the different firms bidding on the project. In a central bureau there is no personal psychological element present in figuring estimates. All quantities are "taken off" by two independent measurers who have no financial interest in the job, and are not influenced by the stress of competition. After they have computed the number of bricks, feet of lumber, bags of cement and so on, the final result can be arrived at by multiplying each item by the unit cost.

The odds are all against the contractor in estimating, when the work is of a complicated nature. The possibility of including items or materials not specified in the contract is small, but there is always the chance that something which is required will be overlooked. In justice to all parties concerned in a building project, speculation in estimating quantities of materials should be excluded. The quantity survey is said to have the following benefits:

1. It eliminates the gambling element in bidding, because under it estimates are based on a definite quantity of materials and a definite quantity of labor. The bids, being based on the same amount of work, are truly com-

petitive. They depend upon the efficiency of the contractor's organization rather than upon his shrewdness.

2. The cost of bidding is reduced, because the billing of quantities is done only once.
3. Periodical payments to contractors for work completed may be made with greater accuracy and fairness than is now possible.
4. The "extras" and "deductions" are almost automatically adjusted.

The demand for a system of quantity estimating has arisen at different times in the history of the building industry. The National Association of Builders debated the issue in 1894. Members complained that, altogether too often, the lowest bidder, after receiving the award, declined to accept it, because he had made an error in estimating. The convention discussed but refused to pass a resolution

> that the filial bodies of the National Association be recommended to consider the advisability of establishing some method similar to the English custom of Quantity Survey which comprehends the employment of a quantity surveyor whose duty is to prepare an authentic statement from the plans and specifications, as to the entire quantity of materials to be used and the work to be done, for the use of all bidders, guaranteeing the same to be correct and recommending a certain percent of the amount of the accepted bid.[29]

Since that time, architectural and engineering organizations have been particularly active in urging the adoption of the quantity survey as a means of eliminating waste and insuring accuracy, but much educational work on its behalf must still be done among contractors. Several attempts have been made by different groups to establish the system in the industry. Electrical contractors in New York City and marble dealers and quarrymen in several localities have tried this. In Milwaukee, Wisconsin, contractors have a quantity-survey

corporation in charge of an engineer and divide the expense of the service among those using it. However, isolated efforts are of little avail. Private bureaus have been started in many centers, offering their services in making such surveys at a rate so low that contractors can afford to use them.

(3) *Percentage contracts.* A third method of solving this problem is that of percentage contracts. Here the owner agrees to assume all the costs of the project and pays the contractor a fee above the cost. It is the cost-plus method as generally applied during the war, but with a number of restrictions. The owner takes all the risk of changes in prices and in wages, and of other contingencies. He would therefore exercise great care in selecting a contractor with experience and integrity.

The percentage form of contract is urged by many as the only safe method. It relieves the builder of financial anxiety and secures from him the maximum efficiency. Under this method, he does not attempt to put up the cheapest building or skimp on quality and materials. The owner knows in advance the profits of the contractor, whose interest is then to perform the work in such a manner that patronage will be maintained. He becomes a professional adviser of the owner; a construction manager.

A possible objection to such contracts is that they might encourage inefficiency and irresponsibility. While the building industry is essentially a cost-plus industry, percentage contracts would make it more easily possible to shift directly upon the owner all increases in cost, whether due to changes in price, to unforeseen contingencies, or to inefficiency. While most of the war construction, amounting to more than a billion dollars, was erected on the basis of percentage contracts, it cannot be said that the results were highly satisfactory.

To protect the owner against the abuses which result under the cost-plus contract, the builder is frequently asked to guarantee that the total cost will not exceed a specified sum.

Where this is the case and where proper precautions are taken in the choice of the contractor, this form of contract tends to establish "a quasi-professional instead of a purely commercial relationship between contractor and owner." [30] With the emphasis shifted from the commercial aspect of the contractor's functions to the service he offers, the constant bickering over "extras" is eliminated; plans can be developed as the work progresses; and there is greater freedom in making changes in the plans when necessary.

The lump-sum contract is in general use and perhaps has wider application during normal times. Whether the contractor makes his profits as estimated or whether he loses so heavily as to put him out of business, rests partly on his ability to figure costs and partly on his luck in not encountering such unforeseen variables as unfavorable forces of nature and adverse conditions of labor. The lump-sum system often presents opportunities for arbitrary and unfair rules against the contractor in favor of the owner. This form of contract usually gives the architect the right to decide all disputed points and has only occasionally provided for arbitration. Frequent conflicts between the architect and builder arise on account of omissions in the contract. The payment for this "extra work" is a potent source of irritation. Until recently, the architect was the sole arbiter of his own errors and omissions. Present contract provisions, however, generally specify some form of arbitration in such matters. These drawbacks are of sufficient importance to make the total cost of the project uncertain until it is actually completed. At the same time the purely commercial relationship existing between the owner and contractor often results in subordinating the quality factor.

(c) *Codes of Ethics — The Working Rules of Employers.* The specific provisions above described seek to improve competitive practices in the industry. Through the activities of various trade associations, much educational work is being done, besides, to elevate the industry to a higher ethical plane.

Manufacturers, contractors, architects and material dealers are following the trade practices and working rules of labor unions. The essential purpose of these is to prevent "underbidding" in wages and working conditions; to maintain uniform standards for the entire industry; to define the relations among workers, and those between workers collectively and employers. These rules are intended to prevent the destructive consequences of unregulated competition. Their primary aim is protection.

This protective policy took root much more slowly in the minds of employers. The individualism of the average contractor was a strong obstacle. He felt no responsibility to the other groups functioning in the industry. However, the increasing number of problems which he could not handle alone forced him to organize. It became possible for the contractors' or other trade associations to do the thinking for the entire group and to define the boundaries of approved business conduct. Adopting the attitude of the trade union, many builders have come to look upon the price cutter and the bid peddler as "scabs."

Working rules of employers are variously called Codes of Ethics, Canons of Conduct, and Codes of Practice. While the American Institute of Architects was one of the first organizations to develop a code of conduct for its profession, other organizations soon joined in this effort. The National Association of Builders' Exchanges, the Associated General Contractors of America and the Building Congress organizations devised more general codes applicable to the entire industry. Since membership in these associations is voluntary, moral suasion alone must be relied upon to enforce these rules of conduct, although violations are punished by some of these organizations with expulsion from membership. The increasing use of commercial arbitration promises to provide an extra-legal agent to enforce codes of ethics.

All codes attempt to secure "fair and bona fide competition," since other methods are, for most contractors, the biggest obstacle to success. An owner cannot expect fair competitive bidding on the part of the contractor unless he himself maintains a fair code of ethics. For example, it formerly was customary for owners and architects to ask contractors for preliminary estimates of the cost of a building project. These estimates were given without charge, through fear of incurring the displeasure of a possible future client. Free estimating service is no longer regarded as "fair competition." The code of ethics of the Associated General Contractors of America states: "The contractor's professional knowledge is the result of his training and experience and if he is called upon for his preliminary estimates or appraisals it is proper that he should be paid for them in the same manner that the engineers and architects are paid for similar services." [31]

Architects frequently submit incomplete plans and specifications and frequently introduce errors — all of which tend to increase the total cost of estimating, with consequent loss to the contractor. Codes of ethics demand that "in asking for definite bids complete plans and specifications be provided," and associations urge their members to refuse to participate in competition under other conditions.

Another vicious practice, intended to drive the bid price to a low level, is to invite bids from a large number of contractors, among them a group of low-grade competitors, "pacemakers," to pull down the price of the others. Ethical conduct with respect to subcontractors, states the code of the Associated General Contractors, requires that proposals "should not be invited from any one who is unqualified to perform the proposed work or to render the proper service, or to whom, in event that his proposal should be the lowest received, the contractor would be unwilling to award the contract." The code of practice adopted by the building congresses of Boston, New York, Philadelphia and Portland (Ore.) urges that the number

of bidders be limited. "Five or six bidders will give ample competition." The objection to pace setting on the part of contractors is not unlike the worker's objection to the same practice. In both cases it forces the legitimate competitors to undue exertion, in one case to keep down prices, and in the other to keep up speed.

Many codes attempt to secure better practice with respect to "time limits" and as to time and place for opening bids. Time is often the essence of the contract, especially in the larger cities where much depends on completing the building before the customary leasing date. Codes of practice urge members of trade associations to require a definite statement of time limits before submitting bids. Architects and owners often overlook such stipulations until after the bid is submitted and the contract awarded. In such a case, the codes state, time limits should be discussed only with the successful bidder, to determine how setting the date earlier or later would affect the cost, taking into consideration the use value of the completed building to the owner.

It should not, however, be taken up with other than the successful bidder as this would open up undesirable opportunities for cutting prices on the score of time in an attempt to defeat the legitimate advantage won by the successful bidder in the original estimating.

Another practice which codes are seeking to eliminate is that of requiring contractors to submit unit prices as a part of a bid. The purpose of this requirement is to make a change in the estimate possible, in case a particular part of the work is dropped or another part added. Without unit prices the troublesome question of "extras" is raised and much confusion results. But the difficulty in submitting unit prices is often greater than that created later if changes in plans become necessary. "Unit prices on general building construction should be used sparingly and with caution" warns the Boston Building Congress.[32]

Of tremendous importance to the owner, as far as quality of work is concerned, is the choice of subcontractors. When quality is a consideration apart from price, special care should be exercised in this choice, as well as in that of the general contractor. Codes of practice differ as to methods of choosing subcontractors. Three are in general practice. Under the first, the general contractor in submitting his proposal submits also a list of the subcontractors whom he plans to use on the work. When quality is important, states the code of ethics of the New York Building Congress, it should be made clear that the character of the sub-bidders will be given consideration in making the award. The owner is then entitled to accept a higher bid if it includes a better list of subcontractors or to demand an improved list from the low bidder. A general contractor can easily offer a low estimate by using incompetent subcontractors. To insure equality in bidding, only those of equal status should be employed.

A second method provides that the architect and owner shall submit to the bidders a list of approved subcontractors from whom estimates may be secured. Under the third method the architect secures bids on certain designated portions of the work from the subcontractors directly. On these sub-bids, the general contractor must base his final proposal. The advantage of this system is that it permits the selection of a more satisfactory list of subcontractors, and expedites the selection of the general contractor. A sub-bidder can submit his net estimate with the assurance that if the contract is awarded to him, it will be at the price he named.

The objections to this system are that it may weaken the control of the general contractor over the subcontractors; that he may have to use some men unsatisfactory to him either in ability or on personal grounds; and that, under this procedure, the architect and owner assume certain responsibilities not otherwise assumed. However, those who use this system testify that it does not actually reduce control over subcon-

tractors, and that the contractor, relieved of the responsibility of selecting them, is in a better position to examine all the provisions of the contract and the character of the work.

(d) *Standard Contract Forms.* The particular practices of the contractor are much influenced by the character of the contract prevailing. Its form changes with changing industrial conditions. During times of uncertainty and instability, such as rapid price fluctuation, the only certain protection to the contractor is that he shall be guaranteed a percentage of profit over cost. Similarly, during a period of relative stability as to wage scales and material prices, the lump-sum contract is in vogue; the contractor bearing the risk of contingencies arising during the performance of the work.

No form of contract or specification could meet every contingency. One of the early difficulties in the contract form was its lack of uniformity for similar work in different parts of the country, or even in the same locality. Agitation against this was started late in the last century, particularly by the American Institute of Architects and later by the National Association of Builders. In 1898, the latter adopted a uniform contract which, with some changes, existed until 1911.[33] In that year the American Institute of Architects issued the first Standard Document which, modified to meet changing conditions, has been in use to the present time. The present form has the approval of the National Association of Builders' Exchanges, the Associated General Contractors of America and other contractors' associations. Efforts are now being made to secure greater uniformity in contract conditions throughout the country.

4. Waste Due to Building Codes and Other Factors

(a) *Building Codes.* A standard contract applicable to the entire industry would stabilize the relations between the different business groups and promote coöperation among them.

The quantity survey would certainly eliminate a large amount of waste due to duplication of effort, to loss of time and energy, to unsystematic practices and to faulty estimates. But the industry is loaded with waste arising from other sources, such as antiquated building codes. There are a great many building codes, varying flagrantly in their provisions. Code requirements differ radically on technical questions about which opinions differ within narrow limits, — for example, floor loads, wall thicknesses, stress requirements and character of material to be employed. It is the opinion of competent authorities that as much as 20 per cent of the cost of building would be saved in some cities by the adoption of codes based on accurate knowledge. Hundreds of cities have building codes adopted more than a decade ago and never since revised.

A striking illustration of how building codes cause waste, by failure to conform to the latest discoveries of science and to more modern methods, is the experience of the American Institute of Steel Construction in regard to structural steel. When steel came into use as a building material, 16,000 pounds per square inch basic stress was specified; but the improvement in the quality of the material since has made possible a 12 per cent increase, namely, to 18,000 pounds, and this without impairing the safety of the building when adequate supervision and inspection are maintained. In many cities, however, the old requirement still prevails. In Chicago, an attempt was made to revise the building code to permit the use of tile in the construction of residences. If this were allowed, a considerable saving would result, as tile is much cheaper than either brick or wood. Engineers claim that it is safe to use tile. The brick interests in alliance with the bricklayers' union opposed the revision, but tile is now permitted under certain restrictions.[34]

(b) *Standardization.* In recent years much emphasis has been placed upon the immense waste in the production and distribution of building materials due to the heterogeneity of

sizes, shapes and colors. The classic illustrations point to the prevalence of 32 thicknesses of a one-inch board; 400 different sizes and styles of window sash; 75 dimensions for face brick; 150 different strengths of window glass; 66 varieties of paving brick; 125 varieties of metal lath; and 480 sizes of paint-brushes. The explanation of this profusion of physical dimensions is that manufacturers are forced by competition to carry a large line of products. They cannot afford to be without most of the patterns carried by competitors. Manufacturers of vitrified paving brick, metal lath, asphalt, prepared roofing, hollow building tile, slate, paints, varnish, plumbing supplies, lumber, lumber products, concrete units, rough and smooth face brick, have had a great incentive to cater to the eccentric demands of contractors, architects and owners.

Yet by far the greatest demand has been for a relatively small number of designs. This fact and the movement to eliminate waste in industry spurred on the standardization movement. Trade associations have coöperated with the Division of Simplified Practice of the United States Bureau of Standards to reduce the number of sizes and styles and the variation in dimensions of building materials. The movement, though still in its infancy, has already made much progress. By adopting the standard sizes, nomenclature and basic grade classifications endorsed by the general conference of lumber manufacturers, distributors and consumers, the lumber industry has already reduced, by nearly 60 per cent, the number of finished yard-lumber items. Through the coöperation of the several brick-manufacturers' associations, face brick was reduced from 39 sizes to 1; 36 sizes of hollow brick tile, each made in a variety of weights, were cut to 12 standard sizes with a standard weight for each; paving brick was reduced from 66 varieties to 1; metal lath from 125 varieties to 24; asphalt from 129 penetration limits to 9; the varieties of roofing-slate sizes were reduced from 60 to 30; descriptive terms for the same from 17 to 8; the thicknesses from 21 to 10; 84

per cent of the varieties of structural slate were eliminated. The steel-sash manufacturers standardized from 60 to 70 per cent of their products, reducing them to 23 stock sizes; the simplification program of the paintbrush manufacturers provides for only 139 sizes of brushes instead of the 480 previously used.

From the standardization of building materials, the movement extended into other aspects of the business. The standard contract of the American Institute of Architects has already been mentioned. Standard specifications defining the best practices for the designing and erection of building materials are now in general use in several building trades. A contemporary activity is the development of the "standard house" and "standard factory" which will facilitate quantity production. This does not necessarily imply repetition of design. The aim is essentially to secure economies in management and in material prices, and more extensive use of mechanical devices, not otherwise feasible on small operations. Reduplication of design lowers costs, upholds predetermined quality and insures more rapid construction. A Cleveland construction company has adopted nine basic types of design, stripped of nonessentials. The details can be added to suit the owner's needs. The mail-order house goes further by delivering the materials ready for erection in accordance with a fixed plan. Standardization of equipment is of more recent date and has not progressed enough to make possible interchangeability of parts for various types of building-construction machinery. In general, the simplification and standardization movement has already produced beneficial results for all groups in the industry.[35] The manufacture of staples rather than specialities will make it feasible to stabilize production in the material-producing industries, to lower building costs by making quantity production possible and to reduce loss of effort and duplication in construction.

(c) *Other Sources of Waste.* Other wastes arise from the failure of the small contractor to take advantage of improvements in technical methods and processes; from strikes and lockouts; from seasonal production and unemployment; from faulty material control; from inefficient management; and from union and employer restrictions. Some of these will be discussed in other connections later. The American Engineering Societies' report on *Waste in Industry* [36] discusses three primary causes of waste in the building industry.

1. Irregular employment: The building-trades worker, as shown by actual records, is busy on the average about 190 days in the year or only two-thirds of his working time.
2. Inefficient management: Haphazard management in planning and controlling work, and lack of standards, which often double the labor cost, characterize most construction undertakings.
3. Wasteful labor regulations: Union regulations in the past have caused enormous losses through direct and indirect restriction of output.

As a secondary source of waste the report discusses "customs or conditions prevailing throughout the industry." In some construction trades, accidents alone involve losses up to 10 per cent of the labor cost, in addition to the loss of human life and energy. Contractors pay $30,000,000 annually for compensation and liability insurance. While it is difficult to estimate with any degree of accuracy just what the total cost amounts to in terms of dollars, engineers and contractors do not hesitate to place the figure well above hundreds of millions yearly. The losses due to the seasonal character of the industry alone totaled over $192,000,000 in 1920. Similarly, those due to waste and disorganization resulting from improper employment policies, strikes and lockouts, labor turnover, lack of job planning, inadequate cost records, absence of production and

efficiency standards, lack of proper equipment, wasteful labor regulations, jurisdictional disputes, restriction of output both by labor and employers, delays for lack of plans and details, design duplication and waste of materials amount annually to a large sum. The industry sustains an enormous loss, and an almost incalculable burden is placed upon the building owners and rent payers of the country.

It is interesting to note that the study made by the Committee of the Federated American Engineering Societies divides the responsibility for this waste in the following manner: management is said to be responsible for 65 per cent, labor for 21 per cent, and outside contacts — the public, trade relationships and other factors — for 14 per cent.[37] As the industry is conducted at the present time, management must lead the movement to reduce the waste caused by inefficient methods.

Keeping in mind the essential soundness of the practices of the majority of responsible construction companies, one cannot fail to observe that a cross-section view of the building industry shows a multiplicity of badly organized, poorly financed, wretchedly managed and fiercely competitive producing units. Each is engaged in a ruthless competitive warfare with other units, but instead of their creating a good product at a low price, the actual result is often a product of doubtful quality at a highly inflated price. In the words of a prominent architect,

> Faulty engineering, unreliable architects, inexperienced and incompetent contractors, inferior grades of materials, poor management, unsound financing, and other bad factors too frequently enter into building work.[38]

5. Coöperative Self-Help — Trade Associations

Improvements in the business and competitive practices of contractors, which aim both to raise the average efficiency nearer to the level set by the leaders in the industry and also to reduce the large element of waste and duplication of effort which has always characterized the building business, are

being made, due largely to the coöperative activities of trade associations. The intense after-war activity in building construction gave a new stimulus to the study of managerial problems, resulting in the adoption of improved practices by the industry generally. Individual firms who have always been in the vanguard of managerial progress contributed much to this recent improvement. The great educational task involved, however, has fallen upon the more than two hundred and fifty local and national associations of building contractors, material producers and dealers, architects and real estate men.

Many of these associations have a long history; some of them were organized in the eighties and nineties of the last century. The most effective trade associations in the construction industry are local builders' exchanges composed of contractors, subcontractors and dealers in materials. These concern themselves with problems of common interest and have, in many instances, been instrumental in placing their members' operations on a more efficient basis. The local builders' exchanges are affiliated with the National Association of Builders' Exchanges, which derives its strength mainly from the strength of its local constituent bodies. About 50 of these local exchanges, having in all about 6000 individual members, are affiliated with the national body.[39] The larger contracting firms of the country are affiliated with a more centralized organization, the Associated General Contractors of America, which has 2080 individual members and 83 local chapters. This organization is concerned with four leading problems: (1) the elimination of irresponsible contractors, (2) reform in bonding practices, (3) elimination of day labor in public-works construction and (4) reform of mechanics' lien legislation. In New York, Boston, Philadelphia, Portland (Ore.), Indianapolis and a few other cities, local building congresses, including not only the business groups directly concerned with construction, but representatives of building-

trades labor, financing institutions and building owners, have done much to improve trade relations, promote better quality of construction, stimulate craftsmanship among workers and secure a better seasonal distribution of building. At the same time material producers and dealers, through coöperative activity, have made many improvements in the methods of distributing and producing building materials. The Portland Cement Association is concerned solely with promoting the use of a standardized product which shall meet uniform specifications. Its extensive research program is centered on (1) finding the facts in regard to the best and most economical use of Portland cement, (2) seeing that the facts are made known and are used in actual practice, (3) securing a wider and more stabilized market. It has also carried on one of the largest coöperative advertising and sales promotion campaigns in history. Other cement associations are the American Concrete Institute, a technical body devoted to the better use of concrete, and the Concrete Products Association, devoted mainly to the development of methods and markets in the field of concrete building units. Matters affecting trade practices are handled through the Cement Manufacturers' Protective Association.

Similar activities are conducted by the trade associations concerned with other building materials. The National Lumber Manufacturers' Association is composed of most of the large regional lumber associations and specializes in statistical summaries of lumber production, distribution and consumption. Its other publications include technical studies of mill construction, building codes and timber taxation and house plans. The regional associations are concerned with trade promotion, uniformity of lumber, grading, traffic service and lumber statistics. The Structural Steel Fabricators are organized on a national scale through the American Institute of Steel Construction, which deals mainly with technical problems and to a certain extent with trade promotion work. The

Associated Metal Lath Manufacturers' Association has been concerned primarily in establishing uses for its product in building. Similarly, the work of the Common Brick Manufacturers' Association, which includes about a third of the industry in its membership, has to do mainly with developing a demand for brick, and does not enter largely into matters of trade practices. The Associated Tile Manufacturers, the National Lime Association, the National Paint and Varnish Association, the National Slate Association furnish other instances of coöperative activities concentrated primarily on trade extension, technical research and standardization.

While all these organizations are to a certain extent concerned with the business practices of their members, the scope of their interest varies greatly. How far a particular trade association concerns itself with controlling competition depends to a great extent on the size of its membership and on the degree to which that membership is stable and efficient. Obviously, the trade association of the producers and fabricators of structural steel, who control almost 100 per cent of the production of this material and are financially able employers and efficient managers, has different problems to solve than has the trade association of electrical contractors and dealers. The latter has to combat a horde of small contractors who constantly upset business conditions by underbidding in quality, wages and prices. It can be said for all these organizations, however, that they mean to regulate the methods of doing business for their particular trade, to define fair competition, to establish working rules recognizing sound business practices, to enforce these standards upon the membership and the industry and to carry on various activities of a sales promotion character seeking to increase profits and make for more stable conditions generally. As a result, while these associations may stress the service-to-the-consumer aspect of their work, they concentrate primarily on the more immediate problems which confront their members: contract forms,

methods of cost determination, price cutting, unfair practices, promotion of efficiency, relations with other producing groups and with labor, legislation, selling prices, standardization, commercial arbitration, credit data and commercial and technical research. The total result is to enable the industry to serve its customers more intelligently and to control the many unstable factors more readily. To be sure, the underlying motive is still to make profits certain and large. The trade extension department is the most active, and advertising the product the most important task. But this does not preclude constructive work. Great economies in production and distribution have already been achieved. More certain and stable relations between competitors are slowly being secured. Wasteful practices are attacked as inefficient and costly, and through research and education better methods are discovered and propagated. The abuses of unregulated competition are being restricted and the industry is slowly devising ways and means to control its more unfavorable aspects. All of these developments are producing significant changes in the competitive structure of the building industry.

PART III

INDUSTRIAL PROBLEMS

CHAPTER IV

THE WASTE OF UNEMPLOYMENT — THE SEASONAL CHARACTER OF THE BUILDING INDUSTRY

THE building industry has long been known for highly unstable employment conditions. From 1904 to 1916, an average of 26.5 per cent of union building-trades workers in the State of New York were unemployed, as compared with 19.8 per cent in all occupations. In Massachusetts, for the period 1908 to 1921, the percentage was 13.8 for the building-trades workers and 10.8 in all industries. In Ohio, for the period 1914 to 1924, the percentage of unemployed for building-trades workers averaged 19.

This exceptional degree of unemployment is due primarily to two causes. One is the highly seasonal character of the industry. The other is its extreme sensitiveness to periods of depression and prosperity in general. The remedy for the second cause must come through control of the business cycle. The building industry can help only indirectly in this effort. However, it can itself remedy its seasonal nature. This chapter is concerned only with the first phase of the problem — namely, the extent, causes and effects of seasonal unemployment, and the remedies therefor.

The importance of the unemployment question cannot be overemphasized. For many years conservation of building materials has been stressed. There have been attempts at economy through such methods as synchronization of completion dates with leasing dates, and elaborate systems of specifications for the use of cement, brick, stone, steel and other materials for various purposes and conditions.[1] Yet very little is done to prevent waste of human power. "The loss of a nickel's worth of material is a great offense, while the waste of men is suffered without the batting of an eye."

During the building boom after the war, when wage rates began to soar and the industry proved to be undermanned for unusual peak production, the loss of man power as a result of seasonal unemployment first received serious consideration. Peak demands, instead of lasting for a few months a year as heretofore, extended over a lengthy period from 1923 to 1927. The shortage of labor was in part explainable by the mechanic's unwillingness to enter an industry which could assure him only about nine to ten months of employment throughout the year.

1. The Seasonal Nature of Building Construction

Before any improvement is possible it is necessary to know what the problem is. Seasonal fluctuations in employment are those which normally occur at the same time each year. "Every process in the industry from the felling of trees to the finished building is organized, equipped and manned to meet a peak or maximum demand which is maintained only for brief periods." [2] During the height of the building season the entire industry is working at its fastest pace and greatest capacity, often, however, at low efficiency. Its chronic condition is one of alternate feast and famine. The attitude of the building owner and the contractor is one of total disregard for consequences. "I want what I want when I want it," has characterized their approach to the problem. All seek labor when labor is fully employed. Workers are rushed to finish a job and therefore must shirk on thoroughness or efficiency. When the peak is passed, the best mechanics are available; materials and equipment are idle.

As long as someone paid the bill, no one gave much consideration to stabilizing employment. In answer to the worker's plea that he must live 365 days a year on the earnings of 200 days, the daily wage was raised. Material prices were made high enough to compensate for losses sustained during

the slump period. The owner paid the bill that he might have his structure completed in time for the rental season. In short, every element in the building industry followed the course of least resistance. As a result of a great increase in building costs, and several other factors having their origin in general economic conditions, an almost complete cessation of building occurred in 1921 and 1922, at a time when the shortage in housing and building facilities was the greatest.

(a) *Statistical Measurement of Unemployment.* To ascertain to what extent the seasonal character of the industry was responsible for the high costs, definite information as to the exact amount of unemployment suffered by building-trades workers was sought. Exact conclusions, however, were difficult. Few statistics were available. Such studies as had been made were either fragmentary or nonrepresentative.

(1) *Philadelphia.* The first fairly extensive study of unemployment in the building trades was made in Philadelphia in 1921.[3] The results showed that the working year was literally shot to pieces because contractors and owners did not plan operations properly. Climatic conditions, heretofore believed to be the greatest contributing cause of unemployment, were found to be of minor importance. The investigators pointed out that indoor work, now done in summer, could be done in winter; that demolition of old structures was started too late; that there was lack of foresight in ordering and assembling material or fabricated products in advance of construction needs; that contractors made no concerted effort to educate the public to realize that winter building is practical. Table III shows the distribution of time in the building trades of Philadelphia in 1920. Table IV gives a comparison of the actual and possible earnings of Philadelphia building-trades workers. The Theoretical Annual Earnings represent what they would receive were they employed for the full possible number of working days. The Average Actual Earnings show what they would receive if each man were employed the average number of days worked per year in his trade.

TABLE III

DISTRIBUTION OF TIME IN PHILADELPHIA BUILDING TRADES IN 1920[a]

Actual Days Worked in Comparison with the Effective Working Days Possible[b]

Trade	Effective Working Days Possible	Average Days Worked Per Year	Total Days Lost Per Year	Per cent of Time Lost
Plasterers	254	170	84	33
Painters	254	182	72	29
Paper Hangers	254	182	72	29
Plumbers	271	200	71	26
Ironworkers	273	150	123	44
Bricklayers	275	182	93	33
Stone Masons	280	185	95	33
Carpenters	280	200	80	29
Electricians	280	216	64	23
Elevator Constructors	280	216	64	23
Engineers	280	200	80	29
Firemen	280	200	80	29
Lathers	280	190	90	32
Composition Roofers	280	182	98	35
Slate and Tile Roofers	280	170	110	40
Sheet Metal Workers	280	185	95	34
Stone Cutters	280	180	100	36
Asbestos Workers	281	185	96	34
Granite Cutters	281	180	100	36
Cement Finishers	281	176	105	37
Plasterer Helpers	281	180	101	36
Riggers	281	175	106	37
Steamfitters	281	180	101	36
Upholsterers	281	225	56	20
Laborers	281	277	4	1
Tile Setters Helpers	282	200	82	29
Tile Setters	282	200	82	29
Average	275	189	86	31

(*a*) Taken from *Waste in Industry*, Federated American Engineering Societies, 1921, p. 64.
(*b*) To secure the number of possible effective working days all Sundays and holidays observed in the trade under consideration and the number of full days lost through the custom of the trade were deducted from the total number of days in the year. Deducting the time lost through unemployment, delays in delivery of materials, or through other causes for which the worker is not responsible, such as the average time during which the weather prevents work, and the average time lost through illness and absenteeism, gives the average time worked during the year, if the worker was not on strike or in a lockout and if he had average success in securing employment.

Table IV shows that in only three of the fourteen trades considered do the theoretical earnings fall below $2000 and in only one trade below $1600. On the other hand, the average

actual annual earnings rise above $2000 in only one trade, and in only two other instances do they exceed $1800. In eight trades they are below $1500. "The difference between the theoretic and average annual earnings lends force to the statement . . . that in the building trades one of the reasons for the constant drive for higher daily wages is to maintain an adequate annual income and to offset the loss due to intermittent employment." [4] These figures lead to the conclusion that yearly wages paid to skilled mechanics in the building trades are not so much higher than those paid to men in industries which have steady employment, as the hourly rates of the two groups of workers might lead one to conclude.

There are no reliable statistics measuring specifically the time worked by a particular trade. The men themselves, for example, give an offhand guess that bricklayers work 200 days a year. Contractors claim a higher figure — another offhand guess.[5] The Structural Service Bureau of Philadelphia secured the daybooks and accounts of bricklayers, which showed the

TABLE IV

WAGE RATES AND ANNUAL EARNINGS OF BUILDING TRADES IN PHILADELPHIA[a]

Trade	Hourly Rate[b]	Daily Rate[b]	Theoretical Annual Earnings	Average Actual Earnings
Bricklayers	$1.25	$10.00	$2,750.00	$1,820.00
Stone Masons	1.10	8.80	2,360.00	1,628.00
Electrical Workers	.90	7.20	2,023.20	1,555.20
Elevator Constructors	1.06	8.48	2,372.88	1,831.68
Engineers	.90	7.20	2,023.20	1,440.00
Lathers	.96	7.68	2,150.40	1,459.20
Plasterers	1.77	14.00	3,570.00	2,380.00
Cement Finishers	.80	6.40	1,798.40	1,126.40
Painters	.80	6.40	1,632.00	1,164.80
Roofers	.65	5.20	1,461.00	1,440.00
Sheet Metal Workers	.90	7.20	2,061.00	1,332.00
Steam Fitters	.90	7.20	2,023.20	1,296.00
Stone Cutters	1.00	8.00	2,240.00	1,440.00
Tile Setters	1.00	8.00	2,256.00	1,660.00

(*a*) *Engineering News Record*, January 11, 1923, p. 63.
(*b*) As of September 30, 1922.

days actually worked over a considerable period of time. This information embodied in Table V is, however, fragmentary. Four men had records reaching back to 1909, in which year the number of days on which the different bricklayers worked varied from 132 to 156. The average for the four was 138

TABLE V

AVERAGE DAYS WORKED AND AVERAGE EARNINGS OF BRICKLAYERS IN PHILADELPHIA WHO KEPT RECORDS [a]

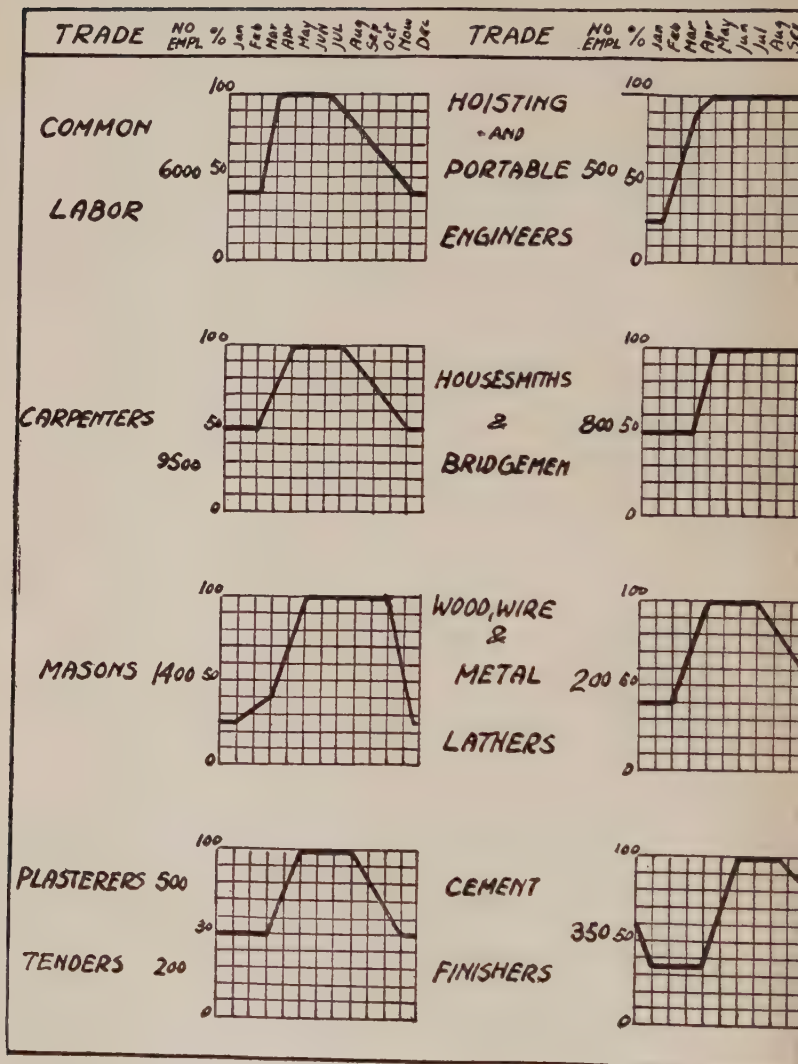
1909–1920

Year	Number of Records	Hourly Rate	Days Worked Per Year	Average Annual Earnings
1909	4	$.625	138	$789.29
1910	4	.625	182	908.35
1911	4	.625	178	889.17
1912	4	.625	174	869.58
1913	4	.625	197	997.93
1914	7	.625 [b]	181	941.01
1915	7	.65	197	1,041.02
1916	9	.65 [c]	198	1,109.11
1917	7	.70	222	1,126.14
1918	6	.70 [d]	235	1,480.91
1919	4	.80 [e]	162	1,584.44
1920	9	1.10	231	2,403.52
Average			191	$1,178.37

(*a*) *Engineering News Record*, Jan. 11, 1923.
(*b*) To May 1st, then rate is $.65.
(*c*) To May 1st, then rate is $.70.
(*d*) To May 1st, then rate is $.80.
(*e*) To May 1st, then rate is $.875 to June 10th, and then $1.10.

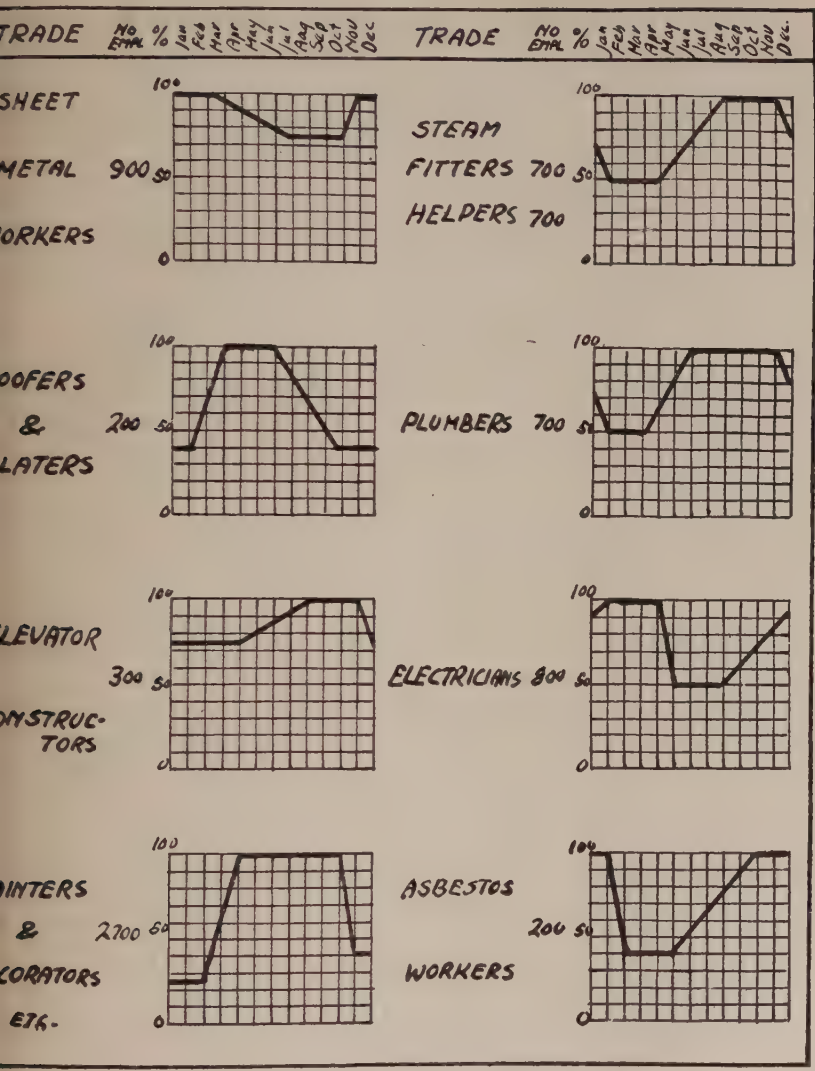
days. In the year 1920 the number of working days ranged from 121 to 202 per year with an average of 182 days.

The difficulty in determining the number of actual working days per year, is that few men are employed by one contractor throughout an entire season. Much time is lost in job hunting. For illustrations of these gaps in employment, note the records of one man, covering a period of five and one-half years during which he worked for 76 different contractors and was hired 107 times, as follows: [6]


TRADE
NO EMPL
%
Jan Feb Mar Apr May JUN JUL Aug Sept Oct Nov Dec
COMMON LABOR
6000
100
50
0
HOISTING AND PORTABLE ENGINEERS
500
CARPENTERS
9500
HOUSESMITHS & BRIDGEMEN
800
MASONS
1400
WOOD, WIRE & METAL LATHERS
200
PLASTERERS
500
TENDERS
200
30
CEMENT FINISHERS
350

III

S IN THE BOSTON BUILDING INDUSTRY*



* Prepared by the Boston Building Congress. Report on Seasonal Labor in the Building Industry, 1923.

1913 worked for 9 different contractors, hired 12 times — 9 months.
1914 worked for 11 different contractors, hired 18 times.
1915 worked for 18 different contractors, hired 28 times.
1916 worked for 19 different contractors, hired 22 times.
1917 worked for 11 different contractors, hired 14 times — 9 months.
1920 worked for 8 different contractors, hired 13 times.

(2) *Boston.* More extensive studies of seasonal unemployment were made in New York and Boston. The Boston study made in 1921 applied only to 26,500 organized workers.[7] However, the data would be equally representative of the 10,000 unorganized workers in that district. Chart III, based upon these figures, indicates with only approximate accuracy the general location and extent of the high and low peaks of employment in each trade and the approximate percentage of unemployment in the low period. The chart shows that in a normal year only 75 per cent of the men at a time have steady work; in other words, workers in the industry are idle for about 25 per cent of the time, or three months each year. Only a very few appear to have recourse to other occupations during such periods of enforced idleness in their principal trade. On the whole, in view of the prevailing wage rates in some trades, the industry may be said to give its men three months' vacation with pay.

The chart also indicates two fairly marked groups, — those trades which are busy in winter and those which are busy in summer. The former group, whose high-peak period lies between October first and April first, consists of steam fitters, elevator constructors, electricians and sheet-metal and asbestos workers. These men are employed chiefly at indoor trades. All the others are in outdoor trades busy in the summer period, April first to October first, with the exception of the plumbers, whose high peak extends into the early winter. Elevator constructors and sheet-metal workers are the most steadily occupied, showing only 25 per cent unemployment at the low point. Painters and decorators, while they have the longest busy season, have the sharpest drop — for three months 75

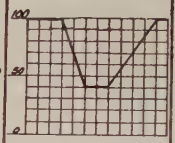
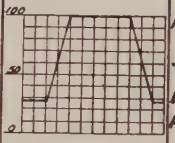
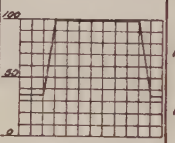
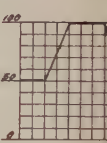
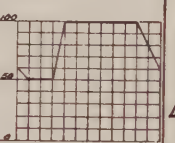
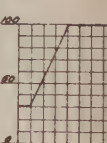
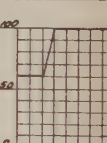
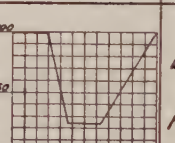
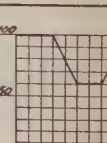
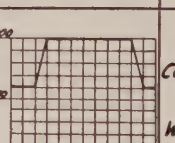
per cent are out of work. Two trades show in their slack period 25 per cent of unemployment, six trades show 50 per cent, four show 60 per cent, one 65 per cent and three trades 75 per cent.

The extreme slack periods vary in length from one and one-half to four months, and it appears to take from one to five months for employment to improve sufficiently to absorb the normal number in the craft. Similarly, the high peak of employment varies from three to six months, with slackening-off periods varying from one to five months. Averaging these curves, it is seen that unemployment for all the building trades is approximately 25 per cent.

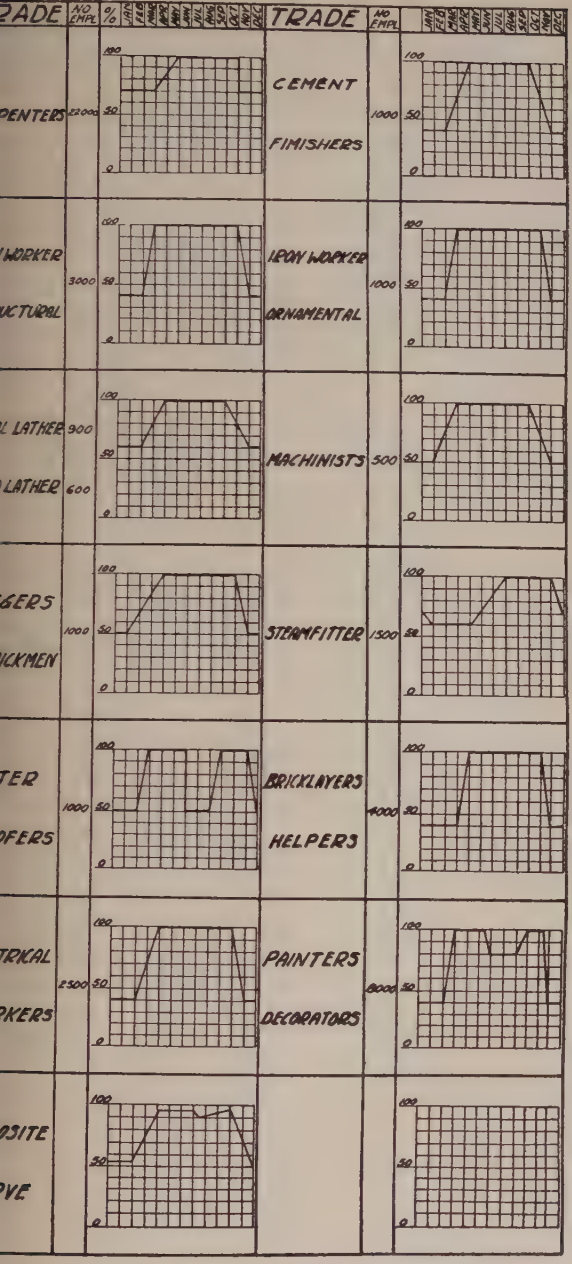
(3) *New York.* The most extensive investigation thus far made was that by the New York Building Congress in 1922. It covered twenty-nine occupations "as affected by the average employment variations of upward of 150,000 workmen annually during the past ten years." The actual number of cases studied involved 92,300 building-trades workers in twenty-nine occupations in New York City.[8]

Chart IV indicates the average employment in each trade for these twenty-nine occupations. Where 100 per cent is indicated on the individual occupational curves, it means not only that all workmen available are busy during the period indicated, but also that there is very often a serious labor shortage at that time. The Composite Curve shows that employment for all building trades, during the past ten years, was approximately 83 per cent; the lowest point at 50 per cent is in December, and the highest peak is during the months from May to October, reaching over 95 per cent. Chart V indicates the seasonal indices of New York City building construction in 1923 based on a three-year monthly average. It will be seen that the high peak is reached in May, June, July and August, and that January and February present the lowest point. Chart VI presents the same information for the country as a whole, indicating the variation for the various classes of building.

SEASONAL LABOR CHART OF CERTAIN T

TRADE	NO EMPL	%	TRADE	NO EMPL	%
ASBESTOS WORKERS	1000		BRICK-LAYERS	7500	
HOISTING AND PORTABLE ENGINEERS	1500		HOUSE SHORER SHEATH PILER DOCK BUILDER PILE DIVER	500 3500	
LABORERS EXCAVATORS COMMON	1200		MARBLE INDUSTRY	1300	
PLUMBERS GAS FITTER	4000		ROCK DRILLERS	500	
SHEET METAL WORKERS SLATE ROOFERS	3000 1000		TILE LAYERS	600	
ELEVATOR CONSTRUCTORS	800		BOILER MAKERS	500	
PLASTERS	2400		CONCRETE WORKERS	6000	

N THE NEW YORK BUILDING INDUSTRY *

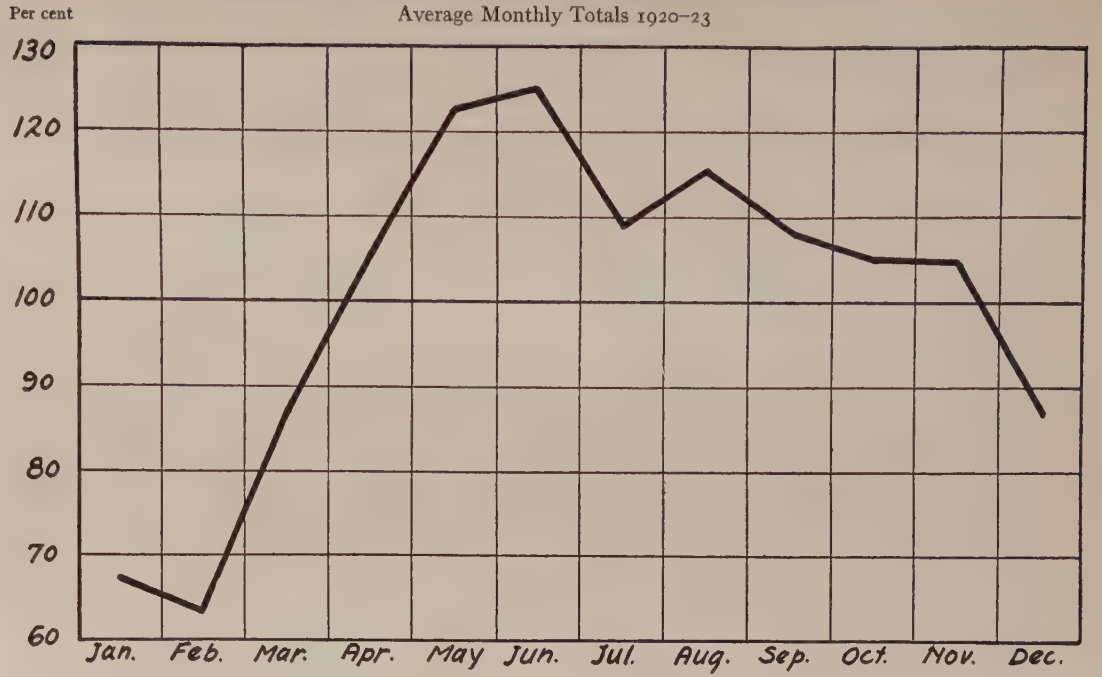


* New York Building Congress

CHART V

SEASONAL INDICES OF NEW YORK CITY CONSTRUCTION *

Average Monthly Totals 1920–23

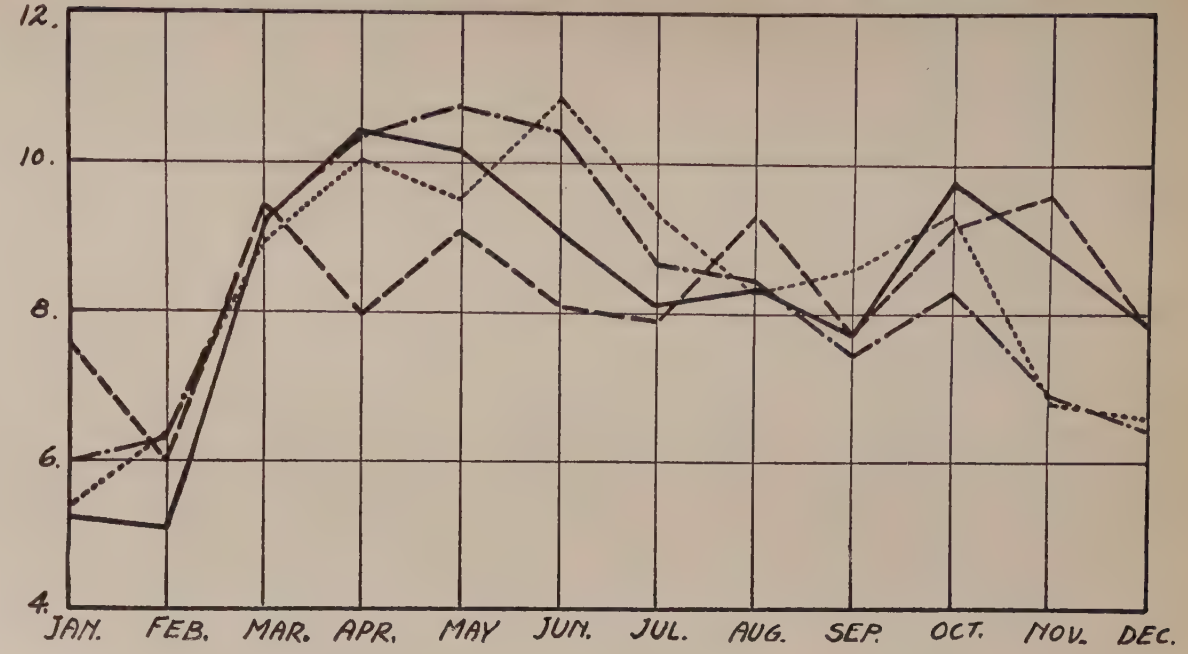


* F. W. Dodge Company.

CHART VI

SEASONAL VARIATIONS IN CONSTRUCTION *

Per cent — Monthly Construction in Percentages of Total Annual Construction, by Classes of Building



* National Lumber Manufacturers' Association

(4) *Portland, Oregon.* The Portland Building Congress made a study of the seasonal unemployment problem in 1924, and the conclusions reached were not unlike those for other cities.[9] Data obtained for this study from forty-three firms cover carpenters, plumbers, plasterers, and painters, and show the number of men employed, of days worked and the amount paid in wages, for an average period of 6.55 years. The figures giving the total number of employes are not very helpful, for some may be at work during only a few days in the month. Much more significant are the figures for the days worked.

TABLE VI

PER CENT OF TIME WORKED BY MONTHS FOR CERTAIN BUILDING TRADES IN PORTLAND, OREGON

(Taking August as 100)

January	54.20	July	91.70
February	51.50	August	100.00
March	65.90	September	94.60
April	63.60	October	90.90
May	77.30	November	91.10
June	85.40	December	61.80

Taking the trades studied as a whole, we find that in the poorest month (February) the men are busy just about half the time. But the different trades vary a good deal in this respect. The painters have the greatest spread between the lowest and the highest month, with their December record 36.2 per cent of that in August. For the carpenters the figures are almost as striking, with February 42.3 per cent of July. Next come the plasterers with 50.9 per cent for February as compared with November. The plumbers show the least range; the number of days for December is 66.9 per cent of that for September. A glance at the table below will make clear the situation in the different trades from this point of view.

The figures for the carpenters are similar to those for the combined trades, except that their peak is reached in July, but

TABLE VII

INDEX OF TIME WORKED BY MONTHS FOR FOUR BUILDING TRADES IN PORTLAND, OREGON

(Taking the highest month as 100)

	Painters	Carpenters	Plasterers	Plumbers
January	36.8	43.2	59.1	82.7
February	41.8	42.3	50.9	70.6
March	60.4	47.5	71.5	89.6
April	72.3	47.3	54.8	84.7
May	83.8	61.8	65.3	91.7
June	88.4	73.8	70.3	88.5
July	76.2	100.0	58.3	80.3
August	100.0	99.8	67.0	84.6
September	80.9	92.0	73.1	100.0
October	72.9	88.9	73.1	96.2
November	52.5	87.5	100.0	80.8
December	36.2	60.8	60.4	66.8

is practically maintained in August. The fact that the carpenters are the most numerous group has, no doubt, an important influence on the total.

(5) *Rochester.* An investigation made in Rochester, N. Y., in 1920, showed the influence of unemployment on the annual earnings of building-trades workers. Not only were the actual yearly wages low, but "even on the basis of full time earnings," cites the Labor Bureau Incorporated in presenting the unions' case at a wage arbitration in 1920, "very few crafts have been able to earn a living wage at any time since 1913." The following table indicates the earnings of workers in certain trades in 1920.

The same investigation made a comparison between actual and possible earnings of building-trades workers in Rochester, N. Y., assuming in the latter case that there was no unemployment and all possible working days were used. The results are shown in Table IX.

The first column represents the sum which a workman would have earned at his rate had there been no loss of employment. The second column indicates the actual earnings, based upon methods and allowances made by the New York State Commission on Employers' Liability and Unemployment and the American Engineering Council.

Professor W. F. Bristol of the Extension Department of the University of Iowa made a very painstaking study of employment in Cedar Rapids, at the request of the Iowa State Fed-

TABLE VIII

EARNINGS IN THE ROCHESTER BUILDING TRADES 1920

(Source: Actual Earnings of Individual Men)

Trade	No. of Men Who had Records	Average Earnings per Man
Bricklayers, Masons and Plasterers	16	$919.68
Carpenters	124	1373.15
Electrical Workers	69	1331.68
Laborers	109	684.57
Painters	82	1399.83
Plumbers	108	1364.62
Sheet Metal Workers	70	1567.14
Structural Iron Workers	50	1366.07

TABLE IX

COMPARISON BETWEEN ACTUAL AND POSSIBLE EARNINGS OF BUILDING TRADES IN ROCHESTER, N. Y.

Year	Full-Time Yearly Earnings	Actual Yearly Earnings
1914	$1151	$833
1915	1174	850
1916	1218	882
1917	1279	926
1918	1403	1015
1919	1735	1256
1920	1735	1256
1921	2206	1597
1922	2206	1597
1923	2336	1691

eration of Labor and the Cedar Rapids Building Trades Council. The primary object was to obtain facts upon which the local Building Trades Council could base its case in an adjustment of wage scales with the Master Builders' Association. Table X indicates the average number of months of employment secured by the building trades in Cedar Rapids, Iowa, and also provides some answer to the debatable question of the amount of time building-trades mechanics are employed at other work.

TABLE X

MONTHS OF WORK AND TIME LOST FOR BUILDING WORKERS IN CEDAR RAPIDS[a]

Three-Year Average

Trade	No. of Men	Months at Trade	Months at Other Work	Months Lost
Carpenters	424	8.0	.0	4.0
Masons	77	7.8	.0	4.2
Electricians	37	10.0	.0	2.0
Painters	113	7.2	2.3	2.5
Paperhangers	40	7.2	2.3	2.5
Plumbers	42	10.5	.0	1.5
Sheet-metal workers	58	11.0	.0	1.0
Laborers	327	8.0	2.0	2.0
Cement finishers	16	6.0	2.7	3.3
Plasterers	22	8.0	1.0	3.0

(a) *Seasonal Operation in the Construction Industries*, p. 43.

The results of an excellent study of building unemployment in Ohio shown in Table XI, do not differ from the findings of investigations in New York, Boston, Philadelphia, Rochester and Portland, Oregon.

These studies indicate that seasonal unemployment is a problem throughout the United States, and that the conditions found are fairly representative. The reports of the Committee on Seasonal Unemployment in coöperation with the Department of Commerce in 1921 also confirm these findings.[10] Unemployment does not affect all trades to the same extent.

TABLE XI

ESTIMATED AVERAGE UNEMPLOYMENT IN THE CONSTRUCTION INDUSTRY OF OHIO[a]

(Based on Seasonal Indices for 1914 to 1924 and number of wage earners reported in 1924. The greatest number of wage earners reported in 1924 is equal to 100. The greatest number reporting was 85,301 workers.)

Month	Average Per cent Employment 1914–1924	Average Per cent Unemployment 1914–1924	Average Number of Workers Unemployed
January	55.7	44.3	37,788
February	53.6	46.4	39,580
March	59.6	40.4	34,462
April	73.1	26.9	22,946
May	81.7	18.3	15,610
June	91.4	8.6	7,336
July	96.6	3.4	2,900
August	99.9	.1	85
September	0.0	0.0	0
October	97.2	2.8	2,388
November	89.2	10.8	9,213
December	74.2	25.8	22,008
Average for Year	81.0	19.0	

(a) Watkins, R. J. *The Construction Industry of Ohio*, Bureau of Business Research, Ohio State University, 1926, p. 84.

Those trades whose work is primarily outside are more subject to weather hazards and suffer a greater loss of working time. Again, some trades are so minutely specialized that there is only a limited amount of work.

(b) *Seasonality in Industries Subsidiary to Construction.* We have indicated, only, the extent of unemployment among the workers engaged directly in the building trades. But other factors in the industry are just as vitally affected. Material manufacturers, dealers, contractors and architects are also subject to the same period of feast and famine. The seasonal ebb and flow in the demand for construction affects the production of lumber, cement, iron and steel, brick, sand, gravel, lime, hardware, paint, electrical equipment, furniture, textiles and a variety of other materials. Addressing the 1922 convention of the American Institute of Architects, Secretary Herbert

Hoover pointed out the extent of overdevelopment of the building-material industries. "Our equipment capacity for production of building materials is probably 30 per cent higher than is necessary for it, if we could secure nearly an average demand. For instance, our lumber mills have a capacity of above 50 to 60 billion board feet, yet the annual production is but from 32 to 40 billion board feet. The annual capacity of our cement mills is about 130 million barrels, but the annual production runs from 70 to 100 million barrels. The annual capacity of our brick plants is about 8 billion bricks; the annual production is from $3\frac{1}{2}$ to 7 billion. There are periods when the production of many building materials is actually suspended, just as is labor suspended on construction work."

The contractor, through lack of capital and storage space, and on account of rapid changes in specifications of stock, does not to any extent keep materials on hand. He depends upon the manufacturer or dealer to supply these whenever he needs them. The dealer must, therefore, have expensive machinery such as cranes, conveyors, bucket loaders and motor trucks to facilitate handling. The office organization must be held together, the salaries, interest, taxes and maintenance expenses must be paid. As the building season reaches its peak, stocks are depleted, manufacturers' deliveries are slowed up, transportation facilities become congested, and an actual shortage of supplies often occurs. As a result, the dealers are unable to make prompt deliveries and owners or contractors are obliged to wait, but expenses continue.

This has been the normal condition of the building-material business. "The general high level of sales for practically all material (as shown by replies received to some 400 questionnaires sent out by the Committee on Seasonal Operation asking for 1922 sales of various materials, month by month) comes in the five months from June to October." More common brick is sold in July than in the three months January, February and March. February shows the least activity, with 2.6 per

cent of the yearly sales, and July the maximum, with 12.3 per cent. The figures for the sales of cement, sand and gravel, face brick, lime, hollow tile and other materials closely correspond to those for common brick and show markedly the influence of seasonal operation. Information on retail sales of lumber from fourteen cities shows June to be the best month, with a total of 11.4 per cent of the yearly sales, and February the lowest —3.8 per cent. There is a close relation between the sales of building materials and the amount of employment for building-trades workers.

Contractors and architects are also affected by the seasonal trend in the industry. Those who manage to secure a fairly even amount of work at all times are the exception rather than the rule. But irrespective of the amount of business, they must keep a certain portion of their personnel and office force. The work of subcontractors is probably much more seasonal than that of the general contractors. Heating and asbestos work, for example, is highly concentrated in the fall and winter months. Excavating, on the other hand, is likely to be concentrated during the spring, after the frost is out of the ground and the rainy season is over. Table XII shows the seasonal trend in contracts awarded during the year.

TABLE XII

MONTHLY PERCENTAGES OF THE CONTRACTS AWARDED FOR THE YEARS 1910–1922

(Total awards equal to 100%)[a]

	Per cent		Per cent
January	6.0	July	8.67
February	6.25	August	8.50
March	9.33	September	7.50
April	10.33	October	8.42
May	10.82	November	6.92
June	10.75	December	6.42

(a) From compilation by the Harvard Economic Service, in *Seasonal Operation in the Construction Industries*, p. 53.

2. The Causes of Seasonal Unemployment

The investigations reveal the principal causes of seasonal unemployment in the building trades: climatic conditions; customary operations involving numerous practices prevalent in the industry, often related to weather conditions but not necessarily controlled by them; leasing dates; time wasted between jobs; inefficient contracting methods and incompetent management, which does not take advantage of available construction machinery; intense specialization of crafts so that only a restricted amount of work is available for one craft; and lack of coördination between the slack season and repair work. Lack of records makes it impossible to determine statistically which of the above causes is responsible for the greatest amount of unemployment. All we can attempt to do in this chapter is to indicate the importance of each factor and to point out the efficacy of the various remedies applied.

(a) *Climatic Conditions.* The explanation commonly given for seasonal unemployment in the building trades is the weather. Workers refuse to work on cold days. Material deliveries are uncertain. The cost of building in winter is high because of the expense of added protection against weather hazards. Owners refuse to speculate on winter delays: snow, cold, sleet and storm from November to February; rain and wind in October and April; heat during the summer months; all make for seasonal unemployment.

It is only in recent years that an attempt has been made to measure the influence of weather on construction. The conclusions reached from the studies on seasonal operations made by the Department of Commerce for the President's Conference on Unemployment point out that the difficulties of inclement weather are not as serious as is generally supposed. "Some cold days merely add a tang to the air that makes workmen act with increased zest; others bring about numbed fingers, lowered vitality, and general decreased efficiency."

Men become heated or chilled; tools are handled less deftly; and more time expended on protection and upkeep of plant, on snow and ice removal and on erecting temporary structures.

These drawbacks, however, are not as proportionately large a cause of unemployment as is generally believed. Various methods involving the scheduling of operations, the dovetailing of different trades, the installation of improvements which reduce the effect of cold and rain — all make possible a longer building season than is generally in vogue at the present time. Data available indicate that about 50 per cent of carpentry work is done under cover and is little affected by cold or rain. There is a growing tendency in the northern states to disregard frost in bricklaying, except for high walls and for those heavily loaded. Roofers can be used for damp proofing when climatic conditions make outside work impossible. Once the building is enclosed, it may be heated. As a result, except for exterior stucco work, lathers and plasterers need not suffer loss of efficiency from climatic handicaps. The same applies to plumbers, gas and steam fitters, electricians, interior decorators and elevator constructors — all of whom work entirely under cover and are subject to very little interruption directly on account of bad weather.[11]

In view of all this, the Committee on Seasonal Operation came to the following conclusion: *So far as climate alone is concerned, and taking into consideration the percentage of indoor work available, the great majority of workers in the building trades as now organized could be occupied the year around.*

Most builders and others concerned with the problem have assumed that it is impossible to build in winter. A mere mention of weather and winter conditions was regarded as an adequate explanation for the entire question of seasonal unemployment. To what extent does weather affect construction? Records of temperature and precipitation in a number of cities were analyzed for a ten-year period by the United States Department of Commerce. From Table XIII it is apparent that

while some cities have many days when the weather is below freezing, Class I days, on which the temperature falls below eight degrees and does not rise above 24 degrees at any time, are relatively few. Class II days create no difficulty for fairly well-protected jobs, and Class III days seldom interfere with building operations. In New York City for the ten-year period, for instance, the number of days in which unprotected outdoor work was stopped was fourteen. The G. A. Fuller Company corroborates this estimate from an actual study made on their own operations for a ten-year period.[12] As shown in Table XIII, rain is of minor importance as a hindrance to work.

General contractors in San Francisco lose less than seven

TABLE XIII

COMPARATIVE WEATHER CONDITIONS FOR NINE CITIES[a]

All Figures are Ten-Year Averages Expressed in Days

(Computation by Division of Building and Housing, Department of Commerce, from U. S. Weather Bureau Records)

City	Number of Working Days on Which Work Was Probably Stopped by Precipitation November 1 to March 31[b]	Number of Working Days, November to March on which Temperature fell below 32° F between 7 A.M. and 6 P.M.				Total Cold or Rainy Working Days November 1 to March 31
		Class I[c]	Class II[d]	Class III[e]	Total	
St. Paul, Minn.	.50	58.6	19.9	27.4	105.9	106.40
Denver, Colorado	.20	24.7	21.8	37.1	83.6	83.80
Chicago, Ill.	2.05	24.2	16.6	31.4	72.3	84.25
Boston, Mass.	2.70	20.3	19.7	31.7	71.7	74.40
New York City	3.60	14.3	16.2	33.4	63.9	67.50
St. Louis, Mo.	3.50	14.9	12.0	29.3	56.2	59.70
Atlanta, Ga.	5.10	1.7	4.9	15.4	22.0	27.10
New Orleans, La.	4.70	0.0	0.2	1.7	1.9	6.60
San Francisco, Cal.	5.30	0.0	0.0	0.0	0.0	5.30

(*a*) United States Department of Commerce, *Weather and Construction*.
(*b*) Precipitation: Rain, snow or sleet of 0.05 inches and over, per hour (water content).
(*c*) Class I (colder days): Days on which temperature fell below 18° at some time, or did not rise above 24° at any time.
(*d*) Class II (medium days): Lowest temperature not below 18° but it reached or exceeded 25° during the day.
(*e*) Class III (warmer days): Lowest temperature between 25° and 32°.

days per year on account of rain. They claim that bricklayers in San Francisco *could* work at least 230 days; electricians, lathers, plasterers, plumbers, sheet-metal workers and steam fitters could work 280 days; carpenters 240; cement masons, ironworkers, painters and roofers 250 days.[13] Weather conditions seem not to be solely responsible for seasonal variation in building operations for it occurs in cities of different climates. The number of days worked per year in New York City, St. Paul and Montreal, with their severe winter weather, is about the same as in Los Angeles, San Francisco and New Orleans, although the number of rainy days in the three latter cities is less than the number of cold days in the former cities. Since seasonal variations show such a close correspondence in cities widely scattered over the country, we are justified in looking for some other cause of unemployment than the weather.

(b) *Customary Leasing Dates.* Much of the busy season in the building trades is artificially created — a result of customary methods of carrying on building operations. Some of these customs originated at a time when conditions were different from what they are now. In the days when the steam heated apartment was uncommon, there may have been good reasons for doing interior decorating, for example, in summer. However, this antiquated custom still accounts for the postponement of renovating until warm weather. The custom of moving on the first of May or the first of October is as much responsible for crowding work into the few warm months as is the favorable weather which prevails at that time. The whole industry revolves around the renting season. The owner is often helpless against the customs which prevail. "Every owner and builder must consider his investment. It is good business for him to rent or sell the new building as soon as it is completed. If the loss to the owner is considerable for having the building remain vacant for any considerable period, there is no inducement for him to complete it at any time of the year when there is no demand for the property."

Definitely established leasing dates concentrate activity in the months near those dates, and a sharp fall in demand follows soon after. The September-first leasing date in Richmond, Va., and New Orleans and that on October first in New York, for example, correspond closely to the end of the peak building periods. In Pittsburgh and Chicago the spring leasing dates encourage winter construction. A single leasing date increases the business peak for the real estate man, telephone company, gas company, electric light company and storage warehouse.

(c) *Leakage between Jobs.* A large amount of unemployment is also brought about by frequent change of employers. Since the work is divided among many contractors, each doing a small part of a small job, workers are usually obliged to change employers as soon as their task on a particular building is completed. How much time is lost in this way depends upon the month of the year in which the change must be made. If work with one employer is completed in October, it may mean weeks or even months before other work is found.

There are many contracting firms whose operations are conducted throughout a wide territory and who take with them to their different operations a small supervisory force, sometimes adding a nucleus of skilled mechanics. There are, of course, contractors and subcontractors who aim to keep certain of their best employes steadily employed, but workers in such a position are in a minority. The contractor ordinarily engages men as he needs them and discharges them when he is through with their services. "Contractors in general feel that they have no obligation to provide steady employment and lay off men when the weather is inclement, material delivery is not prompt, or for other causes which could have been avoided by better management and scheduling of work. . . ." The extent of loss of time between jobs has never been measured statistically, but even a cursory examination of the question leads to the conclusion that it is a vital factor in making the number of working days as few as they are.

The building industry is notorious for its uneconomic practices. Much of the unemployment in it results directly from the failure of management to adopt the latest and best methods of carrying on building operations. These not only would perform the work more efficiently, but would, incidentally, make possible a greater utilization of the industry's man power during the winter months. The incompetency of many contractors in the building industry has already been mentioned. Such contractors disregard the most efficient means of organizing the work, fail to synchronize the various steps in the production process, and are, therefore, responsible for much of the lost time and motion prevalent in many trades. There is a tremendous lack of foresight in failure to order and assemble materials or fabricated products in advance of construction needs.[14]

(d) *Specialization.* It is difficult to measure the influence of specialization on seasonal unemployment. Obviously, if a worker performs only a small fraction of a trade he is more subject to unemployment than one who has a more inclusive craft. A carpenter, for example, who specializes in making concrete forms will be out of work during the months when no concrete is poured.

The remedy proposed for this condition is to decrease the amount of specialization by relaxing the tight jurisdictional boundaries and permitting a worker to work at two or more trades. But jurisdictional definitions are not the real obstacle to this reform. Every foreman wants a special man for special work because the latter's speed and productiveness are greater. One cannot be a specialist at several trades simultaneously; while working at the first craft, one loses practice in the other. Modern construction demands speed, not knowledge; and speed requires maximum specialization.

3. Effect on Wages

The material gathered in the various investigations already cited gives some indication of the influence of seasonal unemployment upon yearly earnings. The $12 and $14 wage per day for the skilled workers shows the direct effect of an eight- and nine-month working year. The higher the mechanic's wage is, the more of a luxury his service becomes, and the smaller the amount of his labor with which the employer tries to get along. He concentrates the mechanic's work and arranges to dispose of him as quickly as possible. The worker retaliates by nursing his job.

The seasonal demand for skilled labor frequently results in the payment of premiums and bonuses in addition to the "official" wage scale. A few years ago a large Chicago newspaper denounced editorially the "extortionate" wage scale adopted by the contractors and the unions, and, in the same edition, carried advertisements offering wages for building workers which were 20 per cent higher than those paid at the wage scale it was denouncing. Labor leaders concede that if the element of seasonal unemployment were eliminated, the union would lose its chief argument for increases in pay. In a recent wage arbitration for electricians in Detroit, the decision emphasized the seasonal unemployment in this trade.[15]

It does not profit to estimate the economic status of the building-trades worker by comparing his *hourly* rates with the *hourly* rates of other mechanics performing work requiring similar skill and exertion. Actual comparisons are impossible because it is difficult to obtain reliable figures of yearly earnings in the building trades, but an examination of statistics of unemployment shows that this causes a huge yearly loss in wages.[16]

In the summer of 1920 the New York Police Department needed another police station and the industry could not supply enough bricklayers, plasterers and other skilled mechanics

to erect the structure. A poll of New York's police force revealed that there were enough skilled workers in uniform to build the station. The question arises: Why should men leave an industry where a $12 to $14 scale prevails and become policemen at an average wage of seventy cents an hour? The answer, in part at least, appears upon comparing the yearly wages in the two occupations. Three months of unemployment leads to chronic dissatisfaction with the wages no matter how high the hourly rate may be.

4. Effect on Efficiency

Seasonal unemployment has a very direct effect upon the efficiency of the building trades. It is fairly evident that a man will automatically restrict his production per day if he sees himself without a job when the structure is completed. He is more likely to do a normal day's work if he sees plenty of employment ahead. A twelve-month working year would go a long way to increase the efficiency of labor. The fear of unemployment would be greatly removed and restriction of output would be less essential. A man's experience, as a rule, contradicts the economic theory that the more work one does, the more work there will be to do. The plasterer, for instance, knows that after he has put on so many square yards of plaster, he will be out of a job. It is, therefore, within reason (or without it) that he will spread out the work over more time.[17] While it may be true that during periods of unemployment the man who has a job will be more painstaking than usual in order to keep it, he will be among the first to "string out" the working time when work again becomes plentiful.

5. Labor's Remedy — The Five-Day Week

For many years the building industry did not look upon seasonal unemployment as a problem. It was accepted with the same resignation as the weather. At any rate, someone always paid the cost. But at least one group in the industry

did not receive a full measure of compensation; nine months' wages could not be stretched to cover twelve months' living. Seasonal unemployment became a vital problem to labor.[18]

The five-day-week agitation is but one plan for relief from irregular employment. To the laboring man the obvious way to regularize employment is to spread the available work over the whole year, thus increasing the number of working days. The painters, plasterers and lathers appear to be the pioneers in the movement to establish the five-day week in the building trades. At the present time more than 65,000 painters in 17 cities, members of the Brotherhood of Painters and Decorators, have secured the recognition of the five-day week. In the past few years the movement has spread to other trades. The plasterers and lathers have won the five-day week in 16 cities; the bricklayers and plumbers in seven; the electricians in five and the carpenters in four. In four cities practically all the building trades are working on the basis of the five-day week. The Brotherhood of Carpenters and Joiners with nearly 400,000 members at its 1928 convention has gone on record for the adoption of the shorter working week for all its members.

The plea of some unions is that the five-day week is necessary as a protection to health; the painter contends that paint fumes are injurious, and a shorter working week is necessary. But the fundamental reason is to get more days of labor per year.[19] The unions in the building trades are making plans for extending the movement for a shorter working week. Union literature and convention proceedings also discuss the six-hour day as a method of securing relief from seasonal unemployment. As early as 1915 the Building Trades Department of the American Federation of Labor passed a resolution in favor of the six-hour day for building-tradesmen.[20] While the five-day-week agitation and the movement for the six-hour day have never received support from all the unions in the industry, because the time was not opportune, the proposals do, however, indicate the solution which labor has in mind for seasonal unemployment.

Will these methods solve the problem? Will the five-day week and the six-hour day regularize building work and provide a year fuller of employment? Will high wages based upon the present high wage scales provide a permanent solution for the two to four months of idleness?

Under present conditions the shorter working day and the five-day week have little promise of increasing the number of working days per year. The economic organization of the industry, with its emphasis on speed, customary leasing dates and quick returns on investment, compels completion of structures at a definite time. If fewer working days are available for the job, the contractor will hire more men to do the work. Instead of being solved the problem becomes more aggravated. It tends to flood the trade with a surplus of mechanics and creates a worse situation when the building season or "boom" is over. The worker temporarily benefits from the shorter week; usually it means six days' pay for five days' work. In some cities the five-day week has enabled several trades to secure "one and one-half" and "double time" for working on Saturday, since they are required to work all possible "overtime," due to the shortage of workers and a great amount of work. Employers point out that in practically every instance where the short week is demanded, it is accompanied with a request for an increased hourly rate, so that the earnings in forty hours will remain the same as for forty-four. But the higher wages in the end result in higher standards of living, with no better ability to weather slack seasons. But to labor, this solution is the only one it can enforce. The economics of the industry make impossible another approach at this time.[21] The remedies proposed by the unions are imperfect. They are palliatives (necessary though they may be), but not solutions. They aim to reduce the hardships and hazards of unemployment. They do not propose to eliminate unemployment and in their very nature they cannot do so.

6. Management's Remedy

A recent study of unemployment proposed to "show that the amount of unemployment in any one business or industry is often the measure of inefficiency in that business or industry and that a reduction of unemployment is usually reflected in the balance sheet by an increase in net profits." [22] Progressive contractors have long realized that management must give attention to this problem. "It is up to us to study the problem from the standpoint of our management, for if a solution is forced upon us by the action of labor, it will be less advantageous to all concerned than if we worked out intelligent means of using a full year's work out of every man on the job." [23]

The initiative must come from management. The methods of reducing seasonal unemployment adopted by some large construction companies indicate that the problem can be solved. Two primary reforms have already been instituted. One has to do with technical improvements which make winter construction possible and so lengthen the building season. The other is concerned with specific improvements in customary practices, which permit a greater utilization of the working force.

(a) *Winter Construction.* Only a few years ago it was unusual for general building contractors to work during winter months and extremely unusual for concrete contractors to do so. The war period demonstrated for the first time the possibility of continuing construction work uninterruptedly throughout the severest weather. War demands and the need for speed in construction led to the introduction of new methods of protecting materials, processes and men. The lessons learned were carried over into peace times and prepared the way for the present widespread movement for winter construction.[24]

"Winter construction" literature now finds its place in every magazine dealing with the industry. The advertising pages of building-material magazines extol the particular qualities of

materials and equipment which lend themselves to use under cold weather conditions. All groups hail winter construction as a solution of the problem. Technical changes in the art of building, invention of machinery and power-driven tools, new materials, and better organization of construction forces make it possible to disregard the element of weather almost entirely in planning a construction program. They make winter lay-offs a matter of tradition and not of fact. It is *unusual* rather than *impossible* to build in winter.

Hoisting machinery and air-driven tools make possible the lifting of heavy structural members. Lumber and steel can be fabricated in the mills, where the weather has no effect. Certain substitutes replace materials more subject to climatic limitations. The high masonry walls which steel replaced could not be erected in winter, owing to uncertainty as to results. Steel, however, lends itself well to winter building. Reinforced concrete, thanks to protective methods, is no longer subject to climatic hazards. Improvements in the methods of placing concrete and the possibility of providing it with a certain degree of heat insulation make it suitable for construction during moderately low temperatures. Reinforcing steel is now usually cut and bent in the mill or yard and is delivered to the job ready for installation. The Portland Cement Association periodically issues technical literature describing the precautions necessary to secure successful winter work in concrete. As a result of this constructive educational campaign, concrete construction in winter not only is possible, but the testimony of contractors and owners leads to the conclusion that it is becoming popular.[25] Concrete units and large hollow tiles of gypsum are quickly laid and easily protected against cold. Wall board and gypsum of wood fibers, used extensively instead of lath and plaster in small houses, are not affected by frost.

Finally, changes in the size and types of buildings also aid in extending the season. Large buildings requiring more than one

season to complete are increasing in number. Large operations offer both incentive for contractors to build during the off-season, and training. Devices for heating materials, protection against rain and snow, and power-driven machinery can be installed at relatively small cost on large buildings. The benefit of year-around construction would counteract or balance the extra cost of winter work.

Whether winter construction becomes sufficiently popular to spread the work of building throughout the year depends upon labor's attitude to it, and its profitableness to contractors and owners. Winter construction is, after all, a new thing. The worker is still doubtful whether it can be carried on. When he finds the weather below zero he decides to stay home, because, in similar weather during the past, his trip to the job was fruitless. One New York contractor, to induce his employes to report during cold weather, guaranteed to pay them for the day whether they were put to work or not. The men's reluctance to work during cold weather is often due to the failure of contractors to provide a warm shelter in which they may eat their lunch and rest. The saloon in former days was the laborers' lunch room, but now the contractors are compelled to supply "rest and comfort" rooms.

Of more importance, supposedly, than loss of working time in bad weather is the lessened efficiency of labor on winter operations. It might be assumed that, since manual operations are performed less deftly when the weather grows cold, there would be a marked decrease in the efficiency of the workers in winter; and an increase in the cost of building, since the wage scale is usually the same in winter as in summer. However, records of winter construction indicate that labor productivity is greater in the colder weather, and labor costs per unit of construction less. Sanford E. Thompson, an engineer on Secretary Hoover's Committee on Seasonal Employment, declares that winter work shows a saving of 15 per cent in brick masonry labor, of about 6 per cent on reinforcement labor and

about 11 per cent on concrete labor, but that the labor of carpenters who make concrete forms costs about 8 per cent more, because they are encumbered with heavy clothing and gloves. "The figures may be considered representative because they are compiled from the records of several large contracting firms in New York and Boston." [26]

Other investigations showed that if the production of a bricklayer in the summer of 1922 were taken as a base of 100 per cent, the production in the winter of 1922–23 was 109.5 per cent; that is, the bricklayers laid 9.5 per cent more bricks in the winter than in the previous summer on a similar job. In the summer of 1923 when bricklayers were scarcer than in 1922, production dropped to 91 per cent of the 1922 figure. These figures disprove the contractor's complaint of a decreased efficiency in winter building. Wherever it has been tried, labor costs on winter construction have been from 2.5 to 5 per cent less than in summer. This is largely due to the fact that the contractor is able to exercise more choice in selecting workmen, and partly to the effect of the weather in giving workmen more zest.

Summing up the factors in favor of winter construction: [27]

1. Labor supply is more plentiful in winter and does not demand bonus payments as it often does in summer.
2. Efficiency of labor is higher in winter than in summer.
3. By carrying on work in winter the expense of labor turnover is decreased. The contractor's organization is kept intact, eliminating the cost of organizing labor forces again in the spring.
4. The expense of dismantling and storing equipment and of assembling, reconditioning and setting it up again in the spring is avoided.
5. Interest charges and taxes are not wasted when the plant and equipment are used in winter. Costs due to part-time employment of capital are similar to those due to part-time employment of labor.

6. Reduction in the irregularity of employment of labor tends to reduce wage rates.
7. Seasonal discounts are given by the material companies on winter deliveries.
8. Seasonal rates are offered by the transportation companies in order to relieve congested periods.

It is apparent that the solution for seasonal unemployment lies with management, using that term broadly to include all elements having control, and power to initiate policies. Under the present organization of the industry, labor occupies a negative rôle in this respect and can do little directly to eliminate seasonal unemployment, through winter building or through the abolition of practices such as customary leasing dates.

Individual effort in this direction cannot be effective. One contractor, no matter how extensive his operations, can do little to lessen seasonal unemployment in building. Only through concerted agitation can the industry reduce seasonal unemployment. Coöperative action is by no means simple. The industry is largely dominated by the type of employer who cares little for the larger aspects of the problem. Unemployment to him is an inconvenience. High wages are simply one form of costs, and are classified together with all other costs. The owner pays the bill, and as long as he makes no objection, little interest in the problem is manifested.

(b) *Coördination of Jobs.* Another method of regularizing employment, besides winter construction, is through coördinating jobs more completely. The amount of time wasted in changing contractors between jobs accounts for many of the days lost during the year. A Philadelphia architect suggests that a central bureau be established as a clearing house for all construction programs in the territory, including national, state, municipal and private work, the use of the bureau to be voluntary.[28] All contractors in the same line of work should pool their labor forces and then so arrange their work that one job would dovetail with another. A constant survey of labor

supply, apprenticeship and cost would educate the public as to when to plan new buildings and when to make repairs. To carry out a suggestion of this nature obviously requires the coöperation of all the contractors in one line of work, and the elimination of the more obnoxious forms of competition between them, both for jobs and for workers.

(1) *Public works.* A method now proposed for taking up the slack in construction is to carry on public and semi-public work during the time when the private building program is small. While the long-range planning of public works is designed primarily to reduce cyclical unemployment, the custom of erecting public projects during the summer is too often followed thus accentuating the peak loads in the demand for labor and aggravating the problem of seasonal unemployment. Much educational work is carried on in behalf of this proposal.

(2) *Repair work.* The Philadelphia Building Congress was the first organization of its kind to appoint a committee on the Coördination of Maintenance and Repair with Construction Work "to secure the coöperation of workers, managers, and occupants in making a survey of the maintenance and repair requirements of building and structures of Philadelphia and vicinity, including Federal, State and Municipal Works, to compile and classify such data, and to make studies to determine the periods when labor on new construction work is least employed so that in every way possible maintenance work and alterations in existing structures may be done at such times as conflict least with new construction requirements and make for greater continuity of employment." Through newspapers and other advertising agencies the Congress carried on a campaign of educating house owners in this matter. "Summer Suggestions To Forestall Winter Waiting for Heat" and "Hints to Householders and Building Owners" for avoiding the fall rush are illustrative of the detailed suggestions made to keep contractors and workers busy during "what has usually been their dullest period."

(c) *Numerous Leasing Dates.* Another method urged which is feasible, is to establish a wide range of renting periods. By distributing leasing dates over the year, concentration of demand upon various factors will be avoided. It is also proposed, and the suggestion undoubtedly has been followed in many instances, that, as an inducement to build in off seasons, contractors lower their bids on winter contracts, which would carry their organization through the dull months. Construction companies which limit their operations to large jobs are urged to take small contracts also, that they may utilize their working forces continuously.

The remedy for the problem lies almost entirely in the hands of management. The methods of carrying on the building industry on a twelve-month basis are available. But what is yet lacking is efficient management with sufficient foresight to coördinate construction activities and so reduce the loss of working time to a minimum. As a prominent contractor stated, "inefficient management is the real tangible producer of unemployment. . . . Production analysis may be a new term in the construction industry but it is a vital element in the elimination of waste. Production schedules, planning, routing, and expediting materials so as to avoid delays and shut downs are real responsibilities of management." [29] If the regularity of construction activities were assured, the industry could proceed with greater certainty, and benefits of stable employment would inevitably accrue to the public as well.

CHAPTER V

CONTROLLING THE SUPPLY OF LABOR — THE APPRENTICESHIP PROBLEM

AT THE beginning of the extensive building "boom" in 1921 and 1922, the industry found a serious maladjustment between the demand and supply of labor. It had never been called upon to meet a building demand amounting to over five billions of dollars. Management, material manufacturers and dealers in most cases adjusted themselves to the emergency, but the shortage of labor could not be overcome by temporary relief measures. The enormous volume of construction taxed the industry's resources beyond its capacity to produce, and finally made it necessary to halt further building loans and material production. Architects refused to furnish estimates, because they could get neither materials nor men. Brick manufacturers, for example, produced only as many bricks as the existing number of bricklayers could use, instead of the amount required by the building projects, curtailing their production from 10 to 20 per cent.

It was no union edict which restrained production, but the law of supply and demand operating during a shortage of skilled labor. The employers met the problem by "stealing workers," "snowballing" wages, and paying bonuses. "The method of expediting work in New York has been for a builder, who required men, to go across the street to a competitor's job and offer a higher wage. . . . What could be expected of a workman when a contractor meets him coming off work and invites him to come across the street to his job for twice as much money and half as much work?" In large cities, contractors were paying sixteen dollars per day when the "official" rate was somewhere between ten and twelve dollars.[1]

This condition was universal throughout the United States. Table XIV indicates the shortage of building-trades workers in 1923 on the basis of the number available in 1920. Table XV, based upon census figures, shows that the number of skilled mechanics increased from 1910 to 1920 by 9.1 per cent. However, this increase did not keep pace with the increase in population nor allow for additions required to fill vacancies due to death and retirement.

TABLE XIV

SHORTAGE OF BUILDING MECHANICS IN THE UNITED STATES AS OF JUNE, 1923[a]

Percentage is the ratio of men short to total requirements. Shortage for the entire country is 23 per cent.

	New Eng.	N. Y. & Pa.	South-east	East Cent.	West Cent.	South-west	Rocky Mt.	Pac. Coast	Aver-age
	%	%	%	%	%	%	%	%	%
Bricklayers	51	39	32	44	42	29	55	23	39
Carpenters	15	3	3	42	13			16	25
Cement Finishers		28	20	40	14		14		29
Electricians			22		59				21
Engineers		11		1	1				3
Hodcarriers		3		52	62				31
Common Laborers	14	14	14	18	5	3			12
Lathers		23	22	67	50	50	17	27	57
Masons		27	24	80			25		50
Painters	33	28	20	75					47
Plasterers	67	50	53	64	50		50	26	54
Plumbers		7	37	38				5	28
Sheet Metal Workers		35	37	67	9		20	11	47
Steam Fitters		5	35	47	34				33
Structural Ironworkers			30	12	9	16	40		14

(a) Taken from Dennis, L. H. *Monograph of Vocational Education Association*, 1924, Series No. 2.

The 1920 census had shown that the supply of skilled building workers had failed to keep up with the general increase in population, and for some of the more important trades had declined substantially from the 1910 figure. In the case of the carpenters, where an increase of workers was shown, it had far

TABLE XV

Building-Trades Workers in Industry and the Number Required Each Year

Trade	Number of Workers [a]			New Men Needed Annually per Thousand [b]				
				Replacement [c]			Due to Increase in Population	Total
	1910	1920	Per cent Decrease	Death	Retirement	Total		
Brick and Stone Masons	169,387	131,257	22.5	17.6	5.0	22.6	14	36.6
Carpenters	810,082	887,208	9.5 [d]	17.4	4.8	22.2	14	36.2
Plasterers	47,676	38,249	19.8	16.6	4.3	20.9	14	34.9
Stonecutters	35,726	222,098	38.1	16.4	3.6	20.0	14	34.0
Painters, Glaziers	273,060	248,394	9.1	3.8	20.0	20.0	14	34.0
Paperhangers	24,780	18,338	26.7 [d]	16.2	3.4	19.6	14	33.6
Tinsmiths and Sheet Metal	56,399	69,725	23.6 [d]	13.9	2.7	16.6	14	30.6
Roofers and Slaters	14,078	11,378	18.5	14.0	2.4	16.4	14	30.4
Cement Finishers	7,000	7,621	8.9	13.9	1.5	15.4	14	29.4
Coopers	3,410	5,232	53.4 [d]	12.4	1.7	14.1	14	28.1
Plumbers and Steam Fitters	148,304	206,715	39.4 [d]	11.5	.8	12.3	14	26.3
Structural Ironworkers	11,427	18,836	64.8	11.3	.5	11.8	14	25.8
Electricians	120,155	212,945	77.1 [d]	9.3	.4	9.7	14	23.7
Total	1,721,484	1,877,994	9.1	14.3	2.7	17.0	14	31.0

(*a*) U. S. Census 1920, and Department of Labor.
(*b*) Taken from Associated General Contractors' *Bulletin*, August, 1922, p. 25.
(*c*) Computed according to life tables on basis of age distribution of 1920. Assumption is that all workers in each age group remain in their trade until they die or reach the age of 75, and that all who reach that age thereupon retire. As a matter of fact many retire before 75, but this will not greatly affect total net result.
(*d*) Gain.

from kept pace with population increase. A decline of 22.5 per cent in number of brick and stone masons, of 19.8 per cent in plasterers, of 26.7 per cent in paperhangers, of 9.1 per cent in painters, of 28.3 per cent in building laborers — these were of sufficient significance to direct attention to the problem. The increase in the number of skilled mechanics since 1910 should have been 31 per cent. On the other hand, the "overhead" workers, engaged directly or indirectly in selling, handling and distributing materials, have increased 20 per cent since 1910.[2]

Heretofore, the industry had been supplied with labor through the usual channels, and the efficacy and continuance of this means were taken for granted. It now became apparent that a conscious effort to keep the industry adequately manned was necessary. Agitation for apprentice training was intensified. Trade schools were started in almost all important cities. Employers, architects, building-material manufacturers, public-school officials, labor leaders and others were organized to stimulate apprenticeship training. In due time these efforts supplied the industry with the needed labor power.

1. Reasons for Periodic Labor Shortage

No one knew who was responsible for the situation. Some held the parents of the American boy at fault because they looked upon manual work as degrading. A "white-collar job" was the goal they set for him. Others blamed the boy because he did not foresee the advantages of a skilled job paying $16.00 a day. Still others placed the blame on the old methods of training apprentices, when for four years the boys were taught odds and ends which could be learned in a few months. Anti-union employers ascribed the situation to the "levelling process" of a uniform wage scale which discouraged boys desiring recognition for special ability; another group attributed the boys' indifference to the union's high initiation fees; others explained the shortage by citing various union restrictions on apprentices. The immigration policy of the United States also came in for its portion of the responsibility.[3]

An important explanation was that the reduced number of working hours plus the alleged 10 to 50 per cent decrease in efficiency required more men to do the same amount of work. In contrast to the efficiency and speed with which building material was produced, its erection was, to a large extent, a hand process. Numerous other reasons were mentioned, such as industrial conditions which enabled young men to secure factory work at high wages. It was estimated in 1923 that there were 800 bricklayers working in the Ford plant at Detroit. The seasonal character of the industry discouraged young men from becoming building mechanics. Also the twenty-one year age limit imposed by unions was said to restrict apprentices. A young man of sixteen to twenty steps into industry and by the time he is old enough to enter the building trades as a mechanic he is already earning a good wage. Some were keen enough to observe that the industry never developed a sound program for training apprentices, and therefore experienced a shortage of mechanics. How relevant are these explanations?

(a) *The Breakdown of the Apprenticeship System.* The apprenticeship problem in its present form arose when the old system of training broke down. In former years, before construction assumed its present magnitude, the contractors themselves usually worked with their men, and had the training of apprentices under their personal supervision. Training was slow and not so strictly circumscribed as it is now. Usually the apprentice began as an errand boy. This was in the days before the extensive use of telephones. In his contact with workers, while on errands, he could often "steal instruction." [4] In return for his labor he received thorough instruction in craft fundamentals.

But with the advent of modern construction methods and the inception of the large construction company, the old system of individual training of apprentices was no more practicable. There were fewer errands to run and less need for boys'

work. Moreover, the training of apprentices was left in the hands of workmen and became haphazard. Whatever method of training did exist broke down because the need for expert skill was no longer as pressing as when the industry was entirely handicraft. Consequently, no satisfactory system of apprenticeship existed in any trade or in any section of the country, although by 1890 it was already becoming a problem of increasing importance.[5]

(b) *Seasonal Character of the Industry.* Intense specialization gave a contractor a small fraction of a trade to handle. He could not assure steady employment or all-around training for an apprentice The seasonal character of the industry, month-by-month employment, was found by most students of the subject to be the most important single explanation as to why boys shunned the building trades and why contractors shunned training them. Boys could not feel encouraged to enter the industry when uncertainty of employment was the only promise they received. Moreover, labor unions, in self-defense, could not encourage an extensive training program which might flood the trades with surplus labor.

> Building trades leaders are beginning to realize that if there could be adequate assurance that the demand for building would be stabilized year in and year out, labor leaders and employers alike would be a unit on the question of training apprentices. Any proper determination of the real needs for any additional mechanics in the industry must take into consideration the present conditions of successive employment and unemployment of the various trades and the effect of further stabilization of the operations of the industry throughout the entire year upon the problem of unemployment. Second, before apprentices are trained there should be a reasonable assurance of employment not only during the training period but also when the full period of apprenticeship has been completed.[6]

Boys were taken on as apprentices, kept working during the busy season and, at the expiration of the rush, laid off. Experience showed that they often drifted into other occupations

during dull building periods, being attracted by more steady employment and immediate returns.

(c) *Union Restrictions.* The employer laid greatest stress, in explaining the shortage of apprentices, upon various union restrictions.[7] For a long time this opinion carried great weight with the public. Even labor leaders came to believe that in many cases union restrictions were responsible for the shortage of mechanics. It is true that the worker regarded the apprentice as his potential rival, and often would refuse to teach him all "the tricks of the game." But that alone could not be an adequate explanation. In the printing trades, for example, where the regulations were just as rigid as in any of the building trades, there was no such shortage.

Local surveys by employers and architects showed that at no time were union restrictions an actual bar to the number of men entering the trades. "It is doubtful if there is a city in the country which the union controls that has as many apprentices as the union rules permit." An investigation conducted in Boston in 1923 showed that there were 80 bricklayer apprentices among the 100 mason contractors, instead of the 300 permitted by the rules of the bricklayers' union.[8] In New York the union rules allowed a total of 2600 carpenter apprentices and 800 painter apprentices, but a local survey disclosed that there were only 800 carpenter apprentices and 125 painter apprentices — from one-third to one-sixth of the number allowed.[9] In few trades were the quotas permissible filled.

A survey undertaken by the Mason Contractors' Association in 1923 covering 58 cities showed that the 714 contractors reporting had only 358 bricklayer apprentices. "These figures," declared the secretary of the Association, "prove conclusively that the so-called union restrictions are not a factor in holding back apprentices. The work to be done is to get the contractors to take on boys at least to the limit of the rules laid down by the unions. As a result of this survey it was estimated that it would be possible to put at least 10,000 more apprentices to

work without interfering with the rules of the bricklayers' union." [10]

(d) *Employers' Indifference.* When these facts became known, it was apparent that a great part of the responsibility for the shortage of mechanics rested with the employer. Even the apprentice program begun in 1923 encountered his indifference.

> I have met no employer who did not endorse the general proposition that the only way in which the rank of skilled labor can be recruited is through apprenticeship training. They applaud the work — and contribute to its financial support, but when they are appealed [to] to take on one or two apprentices and make themselves responsible for their training, they find some reason for refusing or postponing action. "We have no opening just at present. Call up in six weeks or two months. . . . We can't afford to lower the efficiency of our gangs by putting beginners on the scaffolding who will take up the time of the skilled men." [11]

In this situation lies the crux of the apprenticeship problem. Building-trades employers declared repeatedly that training workers was not only an inconvenience but a great expense. After an apprentice was trained, the employer had no guarantee that he would have his services for any length of time. When he hired one or more boys, he did so primarily because there was a certain amount of "boy work" about the job. With that exception he demanded experienced workers and would not hire others.[12] Employers invariably maintained the employment-department attitude in securing their labor supply. "I can hire the men I need, so why spend time and money to train them?" But unless someone in the industry was constantly recruiting the reserve of skilled workers, the supply would be dried up in a short time. It was this individualistic approach to the problem which had to be overcome before a solution could be found.

(e) *Long Training Period.* Employers excuse their reluctance to train apprentices on the ground that the training

period is too long. They point out that everything there is to learn can be learned in a few months instead of four years, the time required in many trades. Extensive training is expensive to the employer and to the apprentice. Not only are boys kept out of the trade, but those who do enter leave at the end of two or three years, to reappear as full-fledged journeymen in some other locality. Every moment a worker spends in teaching a boy is withdrawn from his own task. He is valued as a producer and not as a teacher. Moreover, some contend that a definite term of apprenticeship is not necessary, because individual factors such as skill, intelligence and ability must be given consideration.[13]

2. Influence of Technology upon Apprenticeship

The changing technology of building construction has perhaps had the most vital influence on the problem. It has affected apprenticeship primarily by subdividing the basic trades and increasing specialization. Processes have been simplified and complex performances gradually eliminated. Since subcontractors are specialists in various branches of the industry, the training opportunities which each can offer are naturally limited to his own branch. Moreover, this specialization has partly removed the need for all-around trained workers and therefore the incentive for intensive training. It is estimated, for example, that thousands of carpenters in the larger cities specialize almost entirely in making concrete forms. Floor laying has become a specialized part of carpentry, and even floor laying is subdivided into smaller special branches, such as parquet floor laying. The same development has taken place in other trades.

But of probably greater importance than specialization is the increased speed in the erection of modern buildings. Building operations which a short time ago would have been viewed as creditable performances if completed within eighteen months are now, as a matter of course, scheduled for completion within

twelve, ten, eight, or even six months' time. While there is still need for skill in many trades, in all of them skill has become secondary to speed. Painting apprentices in New York City at the present time "graduate" from a thoroughly organized course and possess the potential ability to become skilled artisans. However, on their jobs they are expected to utilize their acquired skill to "smear so many acres per day." This emphasis on speed precludes a carefully devised training program.

3. Methods of Training Apprentices

It remains now to consider historically the various methods of training apprentices. The old system broke down before the labor unions became an important factor in any locality. There was no consistent plan of training. Boys entered the trade, and by making themselves useful "picked up" particular branches of it, became "improvers" and in due time "graduated" artisans. Bricklayers' laborers and hodcarriers became bricklayers after a few years as assistants. Similarly, with workers in other trades. For many years there was no control of the problem at all, with the result that an increasing number of helpers soon overflowed the trades.

(a) *Early Trade Schools.* The National Association of Builders, one of the first virile employers' organizations in the building industry, as early as 1887 objected to apprentice regulation by the unions "on principle." Although it advocated arbitration of disputes between the contractors and their workers, the issue of apprentice training "was not arbitrable."[14] The Association's program for apprenticeship recognized that the old system did not fit modern conditions and that contractors were unable and unwilling to train new men. It provided training schools which were to combine "schooling pure and simple and practice pure and simple." The system was endorsed by the National Association at their convention in 1888, and local branches were urged to subsidize the schools.

Although a number of trade schools were established, and functioned successfully in New York and Philadelphia, there was a general lack of interest. Probably the most important cause for the breakdown of this plan was the unwillingness of the labor unions to coöperate in a scheme which might increase the number of apprentices beyond the needs of the industry.[15] The unions doubted the sincerity of employers who wished to "give the boys a chance" when as a matter of fact, in many cases, their good intentions resulted in exploitation of the boys. Union restrictions, as the leaders of the unions viewed them, "were not to prevent boys from learning a trade, but to enable them to learn it." A greater number of apprentices in a shop, beyond a reasonable proportion of journeymen, reduced the opportunities of learning a trade. Moreover, they argued that the remedy could not be trade schools, because these were held when the boy must work.

(b) *Union Control.* When unions made their appearance in New York and Chicago, these helpers and improvers became the mainstay of employers in opposing unions. Besides the large number of unskilled and semiskilled workers, many European mechanics swarmed into the building trades. It was to prevent inroads on their bargaining power that the early unions made their first effort at restriction. "It is only by limitation of apprentices," stated the President of the National Union of Bricklayers in 1868, "that we can hope to regulate the demand for our labor." [16] Restrictive rules to regulate entrance to the trade were imposed by the unions. Some locals limited the privilege of apprenticeship to the sons and relatives of members. All imposed an age limit, and all locals limited the number of apprentices whom each contractor might employ. Early agreements took cognizance of these restrictions.[17]

Although the immediate necessity for regulating competition for jobs among workers prompted specific union regulations, labor, as a group, is intensely interested in apprenticeship. This interest arises from its influence upon the position of

labor. An uneven distribution of apprentices among the different occupations may oversupply one trade and produce a labor shortage in another. The former creates a serious menace to the group by injecting competition between apprentices and journeymen, or by overmanning the trades and thereby threatening to undermine the working conditions already established. The limitation of numbers in particular trades is, therefore, a direct response to the dangers prevalent where there is no regulation. It is on the basis of these facts that specific restrictions must be justified or indicted. If any particular occupation is endangered by an oversupply of labor or by competition between boys and adult workers, limitation of apprenticeship is highly desirable. Only where the limitation is arbitrary, out of relation to the needs of the particular trade and prompted primarily by selfish motives, is the practice to be condemned.

Again, the common provision in apprenticeship regulations calling for a training period which to the outsider may appear excessive is often prompted by labor's interest in the quality of training. It is influenced by the desire to maintain a high degree of skill among its members in order that they may maintain their bargaining power, which, in this industry, is based largely on skill. Finally, the union's interest in this question is prompted by a desire to begin early in the propagation of union principles. "These workmen who pass through an organized apprenticeship system have a bond established between them that would be otherwise impossible to maintain."

While the union's interest in apprenticeship may be justified, it is questionable whether control over it should rest mainly with the union. Although several advantages might be cited, such as a greater interest in apprenticeship in the trade, a positive program for training, a greater feeling of security on the part of the apprentice and possibly a greater emphasis on academic education of the apprentice, there are also several potent objections. Where the union leadership is not en-

lightened, the good will of the employer might be jeopardized by union control, or undue restrictions might result.[18]

As long as the supply of trained mechanics was sufficient for his needs, the employer voiced no objection to union restrictions. He merely wanted apprentices to do odd jobs, run errands and assist journeymen. That these boys would eventually find their way into the ranks of the skilled workers did not concern the employer. His opposition to the union policy came, not because it deprived him of the privilege of training apprentices, but because it circumscribed his right to hire as many as he might wish. At this period of industrial relations, this question was believed too sacred for "outside interference." In the building trades employers are yet to be converted to the necessity of apprenticeship. With most of them it is still a "fad" and few relate it to the long-time needs of the industry.

(c) *Joint Control.* By 1905 the unions in the leading cities were able to enforce the closed shop and to secure a collective agreement. With this came the recognition of their right to participate in the control over problems affecting the conditions of the job, including apprenticeship. Collective agreements in the larger cities provide for joint arbitration boards, among whose duties is the regulation of apprentices. In some instances, local school authorities coöperate. These local agreements emphasize regulation rather than restriction. The unions and employers agree on the specific terms of the apprentice contract: age, term of training, union affiliation, kind of training, wage rates, employment of apprentices, number, examination and graduation. About one-sixth of the trade agreements in the building trades provide for the administration of apprenticeship by a Joint Committee, Joint Arbitration Board or Building Congress.[19]

The greatest difficulty is to insure thorough training. Many agreements compel the employer to guarantee at least nine months' employment during the year and compulsory school

attendance during the other three months, usually January, February and March. Generally, however, the educational requirements are not uniform. In some localities apprentices "must pass examinations." In others, the requirement for trade or technical instruction is not explicit. Where attendance at a trade or technical school is required it is usually on the "employer's time." In many instances suspension from the job, or the union, or both, is the penalty imposed for failure to attend.[20] Other provisions stipulate that the boy is to be indentured to the Joint Arbitration Board; that a contractor may take an apprentice for two weeks' probation; but that no more than two boys may be taken for such trial and no boy may try more than one contractor.

With modifications to suit local conditions, similar plans operated in several cities. However, they were not particularly effective in manning the industry with skilled mechanics. Employers did not give the program sufficient support. In many cases they did not take the full number of apprentices allowed, nor was adequate training assured the latter. Odd jobs, errands and unimportant tasks were still allotted to them. This, together with the decrease in European immigration, resulted in the shortage of workers at the close of the war.

Outside of several well-directed trade schools, reaching only a few thousand boys, the building trades were doing practically nothing for the necessary replacement of mechanics. Of all the reasons which militated against the normal supply of labor in the industry, the lack of an organized system of recruiting workers was the most important. Drifters, relatives of building-trades workers, helpers and improvers were the chief sources. These were unreliable. The weakness in the whole situation lay in the fact that apprentice training in the past was regarded as an emergency solution for a problem. When a locality found itself short of mechanics, then it became interested in the question of apprentice training. The shortage

was met somehow, and the interest in the future problem waned. Another crisis later produced the same cycle of interest and indifference, without any lesson for the future.

4. Elements of an Apprenticeship Program

An apprenticeship program which is to meet the constant needs of the industry and supply it with the necessary skilled mechanics calls for a permanent, long-time, continuous policy, instead of one based upon temporary emergency conditions. "Such a scheme," states a prominent association executive, "must be flexible enough in its actual operation to adjust itself to the varying industrial conditions of prosperous and stringent times. There should be no intention, however, in such a program to train more of the youth of the country for any trade than can be normally and readily assimilated into that trade."[21]

Further, any stable and effective system must not only train men to meet a local shortage, but must also correlate the shortage in one place with the surplus in another. The crisis in which the industry found itself shortly after the armistice in 1918 and at the height of the building boom in 1923 created the proper state of mind for a sane approach to the problem. It resulted in the development of an apprentice program by far superior to any previous effort.

(a) *The Apprenticeship Commission — The Building Congress Program.* The organization of apprenticeship training to meet the needs of the industry was given its local impetus by the Building Congress movements which have been organized in several cities since 1921, and national agitation was undertaken by the American Construction Council which was formed in 1922. These organizations, particularly the local Building Congresses, were responsible for placing training on a sound basis. Fundamental principles to guide the movement were evolved; all-around training was recognized as desirable; emphasis was placed on the importance of correlating school training with job training; recognition was given to the necessity of

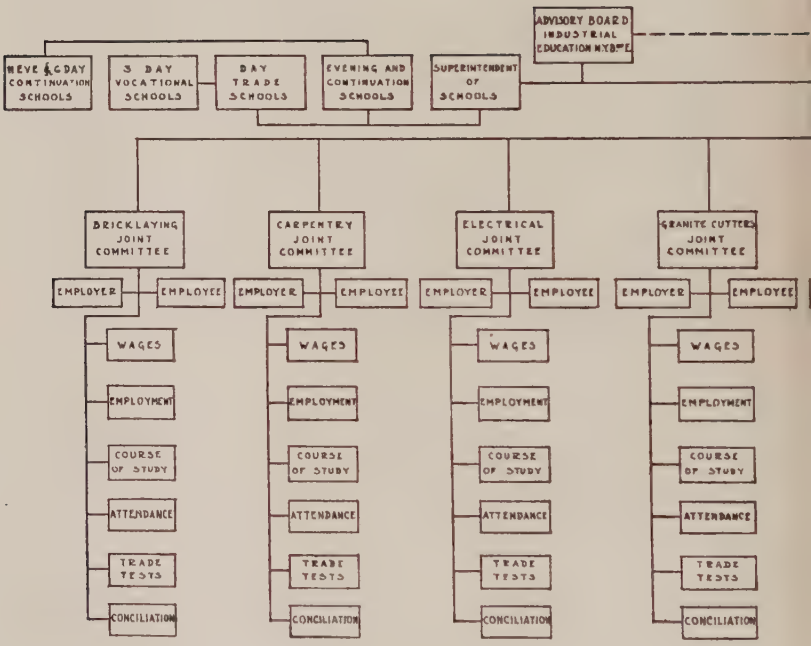
providing relatively permanent employment for the apprentice; and the responsibility of the industry for the protection of the apprentice was accepted. With these principles to guide the movement, coöperation was secured from all the groups in the industry. When it became apparent that the supply of labor was the factor limiting the amount of construction carried on, owners, real estate dealers, bankers, manufacturers, government officials and contractors lent their coöperation. Brick manufacturers particularly saw the very close relationship between the shortage of mechanics and the demand for their product.

In those localities where a Building Congress existed, an Apprenticeship Commission was created, composed of representatives from the central organizations of workers, representatives of employers and representatives from the Building Congress, who would protect the public interest and look after the larger aspects involved in the movement. In Boston, for example, a material distributor and a structural engineer represent the public.

The Apprenticeship Commission is merely an advisory and supervisory body. It makes surveys to determine the needs of each trade. The actual training is in charge of joint committees of employers and labor from the various crafts. These committees determine the many details and rules applicable to each craft,[22] which must be in harmony with the general principles and procedure developed by the Commission. Apprentices are recruited by organized publicity. The apprentice is indentured to the Commission and not to the individual employer. He may be transferred from one class of work to another, or from one employer to another, if necessary, in order to give him an all-around knowledge of his trade, or to keep him steadily employed, although it is recognized that he should not be protected entirely against the effect on employment caused by the major changes in the general business situation.

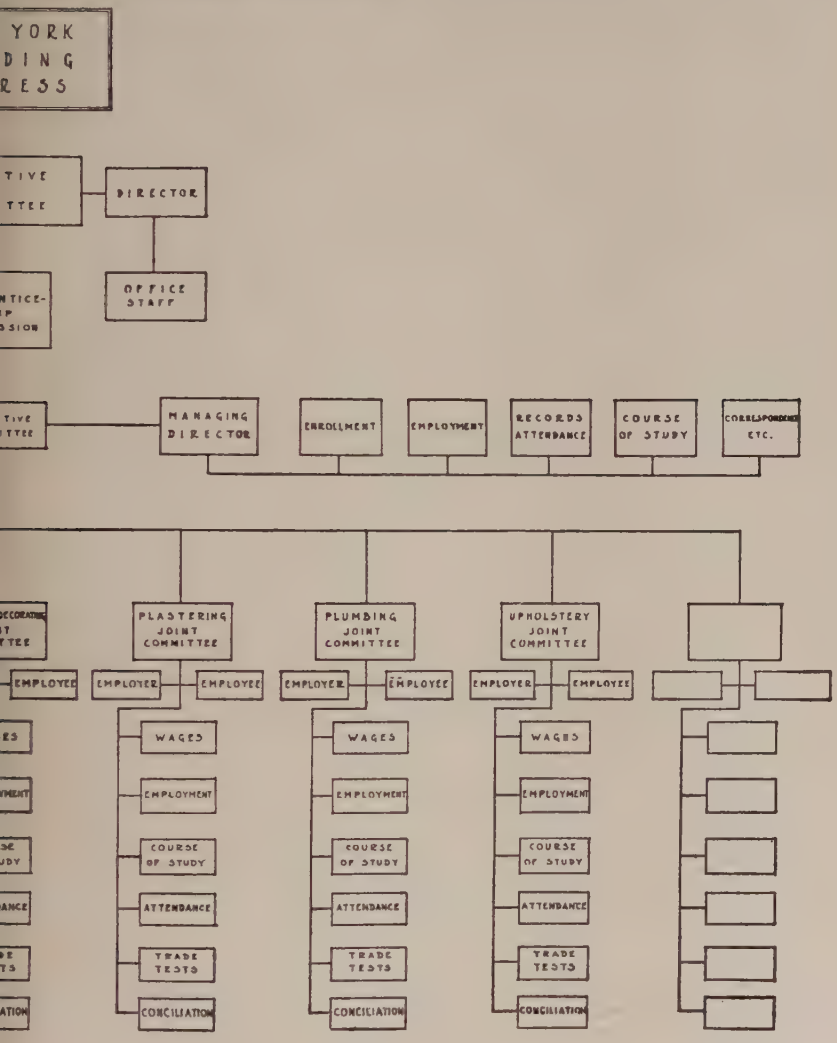
C

APPRENTICESHIP COMMISSION O



VII

NEW YORK BUILDING CONGRESS



The technique of a craft is obtained by actual work on the job during the day, and only related subjects such as mathematics, trade sketching, drawing and shop practice are taught in the class at night. School attendance is made compulsory and failure to attend regularly is a cause for discharge. In some of the trades, school training is extensive.[23] The apprentice is supervised at work and in school by highly qualified educational experts who report periodically to the Apprenticeship Commission. A complete record of his performance is kept at the office of the educational advisor and a semiannual report made to the joint committee in the trade. On the successful completion of the four-year course, the apprentice is given a diploma "containing a statement concerning his trade experience, educational training, journeyman standing, and wage rating, regularly certified by the employer, labor and educational authority," and having this, he is henceforth entitled to employment on a full journeyman basis.

Chart VII shows the relationship between the Apprenticeship Commission and the Craft Committees. This is typical of all cities where a Building Congress exists. This method of control is the backbone of the new movement. It combines job and school education and gives greater assurance of a thorough training.[24]

The coöperation of the educational authorities in the various cities was particularly helpful to the development of this program. Not only did they participate in organizing training on a sound basis, but it has been recognized that without the aid and guidance of educators and boards of education, state and local, it would have been next to impossible to raise finances sufficient to house the apprentices during their course of instruction, to say nothing of paying the instructors and caring for other incidentals of overhead.

Whatever success has been achieved by this method of training has been due to the willingness of the different groups to coöperate in organizing and conducting the training program.

The contribution of the various coöperators can be illustrated by citing the experience of training bricklayers in Cleveland. The Cleveland Bricklayers' Apprentice School, organized in 1922, is conducted under the joint auspices of the Local Bricklayers' Union, the Mason Contractors' Association, The Building Trades Employers' Association of Cleveland and the Cleveland Board of Education. The Federal Government, under the provisions of the Smith-Hughes Law for Vocational Education, and the state board of education each pay approximately one-fourth and the local board of education one-half of the teachers' salaries; the quarters for the school, together with instruments and supplies, are furnished by the local board of education; the salary of the director of apprentices is paid by the Building Trades Employers' Association; the union, through its officers, coöperates with the director of apprentices in keeping check of the apprentices; the materials, such as brick, sand and the like, are furnished gratuitously by a local supply company.[25]

The joint plan of control in various localities has been highly successful, but its limitation rests on the contractors' failure to employ the full quota of apprentices allowed by union rules. As one of the leaders of the movement summed up the situation: "The unions have actually supported the apprentice training movement and if the contractors would do likewise, we might easily double the scope of our work." [26]

(b) *Advantages of the Apprenticeship Commission Plan.* There are important differences between this method of training apprentices and the ones formerly used. The first is the coördinating activities of the Commission. The greater part of the work of recruiting boys and educating them still falls upon the craft committees, but these craft activities, instead of functioning without any relation to each other, are coordinated by the central agency. Apprentice training is begun only after a thorough survey shows a need for it. For example, the ratio of apprentices to journeymen in each trade is deter-

mined by means of a study of seasonal unemployment in the particular trade.

But of even greater importance is the different status of the apprentice under this arrangement. In the first place, the apprentice is indentured to his craft committee and not to the individual employer. Under the old system, the employer had no means of giving an apprentice a thorough training, nor could he assure him steady employment. Under the new method, a community responsibility to the apprentice is established; training, employment and recognition of skill are guaranteed. He is less likely to drift into other employment during slack months. Nor will he find it as easy to violate his agreement with the committee as with an individual employer. Employers, workers and frequently school authorities, being members of the committees, have the opportunity to hear complaints and correct abuses. At the present time the apprenticeship commissions are best organized and most active in Cleveland, Boston, New York City, Philadelphia, Buffalo and Portland, Oregon.

5. Plans in Open-Shop Cities

A different approach to the problem was made in cities operating under the open shop. Open-shop cities had less difficulty with the apprentice problem. In such communities as San Francisco the apprentice program was based on the theory that a four-year training period was too long. Four months would be a closer estimate of the time necessary for adequate training. The longer period was believed to be an imposition by the union. Consequently, San Francisco employers experimented with a six-month course of intensive training at school and on the job. They claim to have trained apprentices to the same degree of skill as is achieved under a four-year course.[27]

The plan provided for intensive training in school under conditions most closely resembling those on the job, for periods from eight to twelve weeks. At the end of this period appren-

tices were placed with employers. In some trades they returned to school for short periods of intensive day instruction. Generally, however, following the initial period in the school, the boys returned to night schools for continued training, especially in the more intricate phases of their craft. They could thus make immediate application of instruction received at school, and could also take problems arising on the job to the school for immediate solution.

While no effort was made to prevent an apprentice from joining the union of his craft, he was told "that during his period of training it was felt advisable for him to maintain undivided loyalty to his employer who was offering him an opportunity to gain a place in the trade. While the Industrial Association, which conducts the training program, has never sought to instill the idea of the American Plan in the apprentice's mind, the conditions surrounding him during his period in the school, and the interest which the Association has taken in his placement, continued employment, wages, and progress, have all served to make him appreciate the sincerity of the Industrial Association in maintaining the American Plan." [28]

Apprentice schools were opened in San Francisco for painting, tile setting, plumbing, electrical work, plastering and bricklaying. The most intense activity of these apprentice schools was in 1923 when the Industrial Association was fighting the bricklayers', the plasterers' and the plumbers' unions, which were attempting to reëstablish the closed shop in the industry. Apprentices were trained on short notice to fill the places of the men on strike. The Association thus handled two problems at the same time — met a temporary shortage in the industry and provided men to replace strikers.

Under the American Plan in San Francisco the union is eliminated as an active factor in the joint control of apprentices. Control is exercised by an apprenticeship committee for each trade, consisting of five employers and two members

of the Industrial Association. An apprentice registers with the Association, agrees to attend the regular school of the Association and to permit it or the apprentice committee to adjudicate all disputes between himself and his employer. He is not allowed to quit an employer without first reporting his grievance to the Industrial Association. Continuous employment is assured by transferring the apprentice from one contractor to another. In some trades the apprentice is paid on a merit system; that is, he is rated on his knowledge of the trade and on his production. "The tendency will be for the boy to be thoroughly trained and the employer will be paying the apprentice a fair wage based on what he knows and what he does."

The employer is required to give the boy a *reasonable opportunity to work* on the various types of work. In the plastering trade, for example, a production standard is determined by the apprenticeship committee. Wages, also determined by this committee, are based on this standard. In some trades, on the other hand, the initial wage is arbitrarily determined by the employers, and an increase of fifty cents per day is made every six months, until the scale of the journeyman is reached at the end of four and one-half years. This is the case in the painting trade, while a four-year period elapses before the journeyman's wage is reached in glazing, tile setting and electrical work. If the Industrial Association is right in contending that an apprentice can acquire a journeyman's skill in six months, then employers are taking advantage of the apprentice's lack of union protection by making him wait from four to four and one-half years for a journeyman's wage while he is giving a journeyman's skill and production. Or, if the employers are right in their wage policy toward the apprentice, then the Industrial Association is wrong in saying that a six-month training period is sufficient.

The merit of the San Francisco system lies in its flexibility in providing for the advancement of the apprentice on the

basis of skill and individual achievement. But this is also accomplished in union centers under the Apprenticeship Commission system, although without a specific agreement mentioning this point. Apprentices in New York and other cities who *merit* more compensation than the minimum scale set by the agreement allows generally receive it. While a greater opportunity to enter the trades without restriction is available to the youths of San Francisco, the protection of their interests rests almost entirely with the Industrial Association. A similar apprentice system was established in Grand Rapids, Detroit, and in Chicago by the Citizens' Committee to enforce the Landis Award.

6. Need for a National Program

From the standpoint of the national unions, standardization of apprentice training was necessary. But the local character of the industry prevented the national labor organizations from regulating this question. As a result, in most cases the local unions were permitted to determine their own apprenticeship system as best they could.[29] So great a difference was apparent between localities in regulations and in methods of training apprentices that a coördinating agency was believed desirable, to bring together the fund of experience which has been gathered and transform it into guiding principles available to the entire industry.

The effort to organize apprentice training on a state-wide basis has not made much progress thus far. Where it has been tried, however, training has advanced rapidly to a high standard. Wisconsin alone has a state-wide program provided by law.[30] Some national unions and manufacturers perceived the need for coördinating the many local regulations, even before the American Construction Council began its activities for a national program. For example, local bricklayers' unions had the right to regulate apprenticeship, but they were required to register the apprentices at the national office. The ironwork-

ers' union as early as 1905 complained that only a few of their locals had apprentice regulations, and expressed the need for a uniform system. The national union determined the period which apprentices must serve, the ratio of their number to journeymen and other conditions of training. The Brotherhood of Carpenters also prescribed for the locals the age limit, and the ratio of apprentices to journeymen. Sufficient flexibility was permitted to meet local conditions.

But more effective national methods were instituted by a number of unions in coöperation with employers and manufacturers. The National Association of Brick Manufacturers, the American Face Brick Association, and the Bricklayers', Masons' and Plasterers' International Union made a national survey of apprentices and coöperated for a period of time in developing an apprentice program. The chief purpose of the campaign was to overcome the employers' inertia and indifference toward apprenticeship training.

Similar plans, although not so extensive, were carried on by other trade associations in the industry. The Heating and Piping Contractors' National Association and the National Association of Sheet Metal Contractors had committees considering this question. Conferences were held at which numerous organizations — such as the National Association of Building Trades Employers, several associations of brick manufacturers, the Mason Contractors' Association, the Bricklayers' Union, the National Association of General Contractors, the American Institute of Architects and the Federal Board of Vocational Education — participated in devising standard systems of apprenticeship training.[31]

A comprehensive national program was launched by the American Construction Council in December, 1923.[32] The Apprenticeship Commission of the Council is composed of all elements in the construction industry throughout the country, including employers, manufacturers, architects, engineers and labor. It has emphasized the importance of "arousing the

country to the need of placing skilled manual labor on a par with the clerical and non-manual occupations in public esteem" and the necessity "for more appreciation of the dignity of craftsmanship."

It was pointed out that national action was desirable for a number of reasons. First, it was necessary to secure support for apprenticeship training in localities where none existed. Second, it was essential to exchange information on technique, materials and experiences of common value. Third, an adequate and efficient labor supply must be based upon national as well as individual local needs and resources. Finally, the relation between apprenticeship and unemployment made it important that apprenticeship needs and conditions of training be related to efforts toward the stabilization of employment. Thus, for the first time in the history of the industry, a group of men representing all its component parts formulated a national program for apprenticeship training.[33]

The total result of all these local, state and national programs for apprentice training has been gratifying to the industry. At least, the shortage of mechanics which tended to slow up the building program has been overcome. In New York City, a few years after the apprentice program was inaugurated under the commission system, over 4000 apprentices were registered. In carpentry alone there were 1500 apprentices.[34] In 1927 and 1928 about 5000 apprentices were registered each year.

The operation of the new system indicates clearly where the fault has been. The old argument that the boys did not want to enter the trades and preferred white-collar jobs has been largely refuted. Experience in New York, Boston, Philadelphia and elsewhere showed that with a proper approach from contractors, educators and building-trades leaders, the industry could secure all the apprentices it needed. Secondly, the belief that union restrictions were alone responsible for the shortage of mechanics has been thoroughly disproved. The limiting factor throughout was the employer's inability or un-

willingness to assume the responsibility of training. In its forty years of bungling along with its numerous apprenticeship programs, the industry little realized that the trouble persisted because it attempted to apply an individualistic system of training in a modern industrial community. The Building Congress and the American Construction Council introduced group responsibility and coöperation.

What still remains is a large task. In the past the machinery was set up to remedy an emergency situation, and when that was over, it disintegrated. Now, again, machinery has been established. So far it appears that the organization is on a permanent basis. Sufficient interest has been aroused, and the industry has the opportunity to take a long-time view of the subject in creating the agencies for a constructive approach to one of its important problems. Such agencies might train workers without reference to industrial conditions and thereby endanger the industry's stability by overmanning it, and encounter the opposition of the unions.[35] Or, if it follows the principles already developed, an organization can correlate the larger aspects of the industry's economics with the program for training skilled mechanics.

CHAPTER VI

THE STRUGGLE FOR CONTROL OF WORK — JURISDICTIONAL DISPUTES

DISPUTES among unions concerning the jurisdiction over certain classes of work constitute the largest single cause for stoppages in this industry. Questions of wages and working conditions, once the pivotal points of dispute, are of secondary importance now. Adjustment machinery exists for handling such disputes when they arise, in those centers where unions are recognized. But no machinery has yet been devised to cope effectively with jurisdictional controversies.

1. Importance of Jurisdictional Disputes

The issues in such conflicts are due to the complexity of the industry and to the numerous organizations which exist therein. There are more than fifty distinct trades, each having a separate local craft union. It is often difficult to determine where the boundary line should be drawn between the work of one craft and another. A few type questions will illustrate the difficulty. Should the carpenter or the ironworker place "concealed" iron bucks in the partitions in which wooden doors are to be set? Which trade should knock off the rough nubbins or fins from ceilings of new buildings — the mason or the laborer? Which union should build scaffolds — the common laborers', carpenters,' plasterers' or bricklayers'? The four have each claimed part of the work at one time or another. Whose job is it to paint a radiator? Does it belong to the Brotherhood of Painters, Paperhangers and Decorators or to the United Association of Plumbers and Steamfitters? Which of the five unions — the electrical workers', the sheet-metal workers', the ironworkers', the plumbers' and steam fitters' or the machinists' — should control the use of acetylene and

electric welding? The sheet-metal workers and carpenters quarreled for twenty years over the right to erect metal trim. Should painters or asbestos workers put up the muslin or canvas used for decorative purposes? The waterproofers, painters and roofers disputed the right to apply damp-resisting preparations. The plasterers, cement finishers and concrete workers claimed the right to repair defects in concrete work caused by leakage or the sagging of forms.[1]

The labor of erecting a big building falls under a score or more of classifications. Each classification is an air-tight compartment in which only members of a particular union have any right to work. One man may use the tools, another must carry them about the building; one man may dump rods for reinforcing concrete in a pile, another must distribute them. Iron of No. 12 gauge or heavier must be handled by the boilermakers' union; lighter than No. 12 gauge, by the sheet-metal workers'. Plaster board containing fibrous material must be erected by the plasterers; other kinds by the carpenters. Water pipes must be installed by plumbers; steam pipes by steam fitters. The installation of an elevator, until a few years ago, involved seven trades. The extent of the twilight zone is so great that one trade is continuously encroaching upon another. With such minute distribution of work, friction is inevitable, especially at marginal points.

Such disputes have become so important that many unions consume more time in protecting their trade jurisdiction from encroachment by other unions than in protecting working conditions and standards from attack by employers. It has been estimated that 95 per cent of the strikes and 75 per cent of the days of idleness in the building trades are due to jurisdictional controversies among workers.[2] An incident in the Chicago building industry illustrates vividly how these disputes dissipate the energy and time which could be given to more constructive matters. The secretary of the central organization of building-trades employers writes:

A dozen or more delegates presented themselves before the . . . association before which they asked to be allowed to state their grievances. Schultz of the cement workers complained that the building laborers were encroaching upon their work, while Gussman of the gravel roofers had a complaint against the laborers and plasterers. Tom Walsh of the sheetmetal workers stated that the carpenters were doing work that belonged to his craft, and Cooney, representing the structural iron workers, had a kick against both the laborers and the lathers. Gugenshack of the cement finishers claimed that contractors often employed laborers to finish, and Halm protested strongly for the glaziers against the carpenters who placed glass. [3]

Here a group of union officials, representing the various crafts in the industry, appear before an organization of employers and recite grievances consisting wholly of complaints against fellow unionists who are usurping someone's else work.

This incident is typical of methods of procedure throughout the country. Civil war is not too strong a term to describe some of these inter-union struggles. Union officials and others long ago realized their importance and danger. As early as 1902 at the American Federation of Labor Convention, Samuel Gompers said, referring to jurisdictional disputes: [4]

Beyond doubt the greatest problem, the danger which above all others most threatens not only the success, but the very existence of the American Federation of Labor is the question of jurisdiction. No combination of labor's enemies need cause us the apprehension which this fratricidal strife does in the claims made by the unions for the extension of their trade jurisdiction. There is scarcely an affiliated organization which is not engaged in a dispute with another organization (and in some cases with several organizations) upon the question of trade jurisdiction.

Two and a half decades later the situation remained almost unchanged. The Secretary of Labor, James Davis, in addressing the National Board for Jurisdictional Awards in October, 1925, summed up the situation as follows: [5]

Organized labor has withstood the destructive assaults, within and without its own ranks. It cannot be destroyed. But

like other movements in this or any other country, it can commit suicide through internal dissension. And these jurisdictional disputes are just that form of suicide. . . . It supplies those who are opposed to organized labor with just the propaganda they want to refuse to deal with the unions. . . . It is only the building trades that are directly affected by these . . . disputes, but I don't know of anything that has done more to hurt labor in general.

Summing up the situation as it affected the trowel trades, President W. J. Bowen of the Bricklayers', Masons' and Plasterers' International Union said:

In some periods of the history of these organizations there were continuous sporadic strikes — not merely yearly, seasonal or monthly strikes, but daily strikes. Men went to work not knowing whether they would finish a day or finish an hour. . . . The members were deprived of steady work and of the earnings flowing from steady work. Contractors never knew what conditions would confront them from day to day. Building owners, in no way responsible for what might happen and powerless to prevent it, were penalized by this continuous upheaval. Jurisdictional disagreements were . . . almost continuous . . . Personal ambition found its richest field.[6]

2. Causes of Jurisdictional Disputes

Jurisdictional disputes are a condition and not a theory. They do not come about as a result of some carefully conceived plot on the part of trade-union leaders, but are the result of certain developments in the economic conditions of the industry. What is responsible for jurisdictional disputes in the building industry? A historical examination of a few important struggles would best answer the question. It would also clarify the relationship between technological changes, business methods, psychology of trade-union leaders and members, structure of workers' organizations, and inter-union disputes.

The desire to possess complete control over one's field of activity is not a peculiar characteristic of labor unions. Every business man wishes to extend his field of control and to in-

crease his business. On more than one occasion we find jurisdictional disputes on the side of the employers in the building industry. "It has been noted of late," reads a letter sent to the membership of the Builders' Exchange of San Francisco, "that there has been a tendency of . . . some general contractors to take work which has been generally called the specialty work of the various crafts." [7] The architects and engineers also have their jurisdictional quarrels. An architect who dispenses with the services of a general contractor, or a general contractor who dispenses with the services of an architect or with those of subcontractors, is regarded as violating the business man's code of ethics. Because there is no effective organization to enforce their jurisdictional rules, such disputes among employers do not attract attention outside of the industry.

The tenacity with which workers cling to their jurisdictional claims is readily explainable. Once a worker attains skill and speed at a particular specialized task, he regards this as his property and will prevent trespassing upon his "vested right" as he would trespassing upon any material property. Moreover, each trade has a deep conviction that the amount of work is limited. The fewer there are who share in this limited amount, the greater the portion for each. Added to these subjective causes, is the assumption of superior competence to do certain tasks.[8] But fundamentally these subjective causes are rooted in technological changes. The primary causes of jurisdictional disputes among the unions in the building trades are the following: (*a*) Introduction of new building materials, (*b*) introduction of machinery, (*c*) changes in construction methods, (*d*) aggressiveness of some unions, (*e*) the prevalence of dual unions and (*f*) the claims of industrial unions.

(*a*) *Introduction of New Materials.* We have seen in Chapter II how changes in the methods of construction, the introduction of machinery and the substitution of new materials played havoc with the existing trades by reducing the amount of handwork and by establishing new trades. The mechanization

of many trades also reduced the amount of skill and clouded the boundary line between trades. It is quite probable that if no more new materials were introduced, jurisdictional disputes would in time disappear.

Wood as a construction material in the larger cities is slowly being supplanted by steel and concrete; the carpenters' union has felt the effects of the change. In several eastern cities, after 1906, a material known as metal trim was introduced and erected by members of the Sheet Metal Workers' Union, but soon this material was being wrested from their control by the carpenters. The latter union based its claim to erecting metal trim on the fact that this material replaced wood and that the tools and skill of a carpenter were required to install it properly. Such a theory of control carried into practice would protect any trade against the inroads of any substitute material.

In this struggle for control the employers and manufacturers found it more advantageous to support the carpenters' union. The sheet-metal workers' union was numerically smaller and occupied a less strategic position in the industry. A carpenters' strike could tie up building operations. Moreover, if the carpenters got control, it would result in more work for the carpenter contractors. There was also the fear that if the sheet-metal workers controlled the erection of this material, they might attempt to unionize the sheet-metal shops. The other union was not stressing that phase of the problem. With the assistance of employers, the carpenters were able to control this work in all important cities.

A contest of more than twenty years' duration followed. The Sheet Metal Workers' Union, with its small membership, had little influence in labor councils, but the Building Trades Department of the American Federation of Labor was sympathetic to its claims. In 1909 the Department instructed the Brotherhood of Carpenters not to usurp the jurisdiction of the Sheet Metal Workers' Union in the erection of metal trim.[9]

The New York City carpenters had already been awarded jurisdiction by a local board, and the national union refused to abide by the Department's decision. Consequently it was expelled in 1910. The American Federation of Labor ordered its reinstatement in the Department, but this did not change matters very much.[10] The aggressive carpenters' officials were aware of a "solid alignment against the carpenters on practically all matters," and this time the union withdrew of its own accord, expecting that its strength and the amount of its monthly dues to the Department would compel submission.[11]

The American Federation of Labor, anxious to settle this dispute, again injected itself into the controversy and ordered the carpenters to attend the next convention of the Department. They obeyed. The compromise which they offered was not accepted, however.[12] The American Federation of Labor proposed that the carpenters should relinquish their claim to the manufacture of metal trim and agree that those engaged in the erection of hollow metal trim might belong to either union. This plan was also rejected. Succeeding conventions continued passing resolutions but got no results.

The matter hung fire until it came before the National Board for Jurisdictional Awards in 1921. The decision was in favor of the Sheet Metal Workers' Union. Although the president of the carpenters' union was a member of the Board, the Brotherhood of Carpenters refused to abide by the decision, and withdrew its allegiance to the Board. Since employers and architects had pledged allegiance to the Jurisdictional Board, the carpenters' refusal to acquiesce threw the industry into chaos. In 1923 the Board granted a rehearing of the case. Employers testified in favor of the carpenters. A weighty argument was that the union already controlled about 98 per cent of the work. In spite of pressure, the Board upheld its previous ruling. Three more years of continual warfare followed and then a compromise agreement was signed in May, 1926, which conceded most of the carpenters' claims.

The carpenters' union maintained control over this material only because it could fight the entire building-trades labor movement. Its aggressive policy was at least partly responsible for weakening the prestige and power of the adjustment agency set up to solve these contentious questions.

Other unions have been equally affected by changes in materials. For a long time the bricklayers believed themselves immune from injury by new materials. Even after the development of steel-skeleton construction, brick was still used on steel buildings as a veneer. However, many changes occurred which embroiled the union in numerous jurisdictional disputes. In 1915 the Journal declared: "The tile layer and the mantel builder, the asbestos worker and the damp proofer, the cement and concrete worker are now applying themselves to what rightfully belongs to the bricklayer." [13] When tile and glazed brick came on the market, the tile layer claimed this work. The bricklayers had no other defense than that all exterior work belonged to them. The inevitable jurisdictional dispute resulting lasted from 1908 to 1920. In that year an agreement with the Tile and Mantel Contractors of America gave the bricklayers exclusive jurisdiction over the installation of exterior and interior tile and related work.[14] The tile layers' union was gradually affiliated with the bricklayers' union.

The introduction of plaster block partitions in 1902 created disputes between the bricklayers, masons and plasterers. The bricklayers claimed this work on the ground that it was a substitute for brick and tile. The rapidly increasing use of hollow tile and block arching for fireproofing caused considerable trouble between bricklayers and laborers in a number of cities.[15] At one time terra cotta was used as trimming in place of natural stone. But after 1910 thousands of magnificent buildings were constructed with terra cotta facings. Then the question arose whether terra cotta blocks were a substitute for brick or for stone. A dispute between the bricklayers and stonemasons ensued over this question.

We have already described the bricklayers' reaction to the introduction of concrete. For almost a decade the union hesitated between a policy of opposition to this material and one intent upon asserting control over concrete. When the latter step was finally taken, the claims of other unions had to be contested. The use of concrete also brought about disputes over the installation of reinforcing rods in concrete. When metal lath was introduced in New York, the Metal Lathers' Union, a local specialized group, acquired control. Outside of New York City the Wood, Wire and Metal Lathers' Union claimed this work. But soon the structural ironworkers, the sheet-metal workers and the laborers also asserted their claims. About half a dozen jurisdictional quarrels arose over this one material.

The 1909 convention of the Building Trades Department awarded the placing of rods in concrete to the ironworkers. The metal lathers of New York refused to abide by this decision. Under the New York plan of settling jurisdictional disputes, the work is awarded upon proof of possession, and the metal lathers had a clear claim on that basis. Several conventions of the Building Trades Department between 1910 and 1920 continued to award this work to the ironworkers, but in many localities laborers and lathers retained control.[16] In 1921 the Board of Jurisdictional Awards gave control to the ironworkers, and the trouble was believed to have been settled.

However, another phase of this dispute appeared. The employers demanded a rehearing, championing the right of the Building and Common Laborers' Union to do this work. The employers emphasized that

> No skill greater than that exhibited by common labor in handling steel is required to place it in its ultimate position as this . . . is marked for the workmen and the final operation of fastening in position is a manual operation which any intelligent man can learn without any previous experience. The handling, removing, bending, laying, tying, wrapping and placing in position of rein-

forcing steel and iron is common labor whose wage scale is fifty per cent lower than that of the iron workers.[17]

But since the laborers' wages were lower than those of the ironworkers, the other unions greatly opposed a transfer of jurisdiction. The Board reaffirmed its decision, and the work legally belongs to the ironworkers.[18] This dispute illustrates how employers inject themselves into jurisdictional disputes by supporting the union whose wage rate is lowest.

(b) *Introduction of Machinery.* The introduction of machinery is another fruitful source of jurisdictional disputes. Machinery tends to standardize trades and reduce the amount of skill required to erect the finished products. Standard parts for plumbing decrease reliance upon skilled plumbers. Highly decorative plastering, which at one time demanded the greatest skill, is now made on strips of canvas or burlap bag at the factory, and can be hung by workmen of lesser skill than plasterers. Thus, where machine products displace skilled labor, jurisdictional fights occur as to which workers should operate the machine.

The bitterest and most costly dispute in American labor history, between the Amalgamated Wood Workers' International Union and the United Brotherhood of Carpenters and Joiners, was caused by the introduction of woodworking machinery in the mills. Before 1860 the outside carpenter did all the woodwork required for a building. The inside carpenter was a cabinetmaker engaged in making furniture. There was no conflict between the two groups.[19] However, woodworking machinery soon deprived the outside carpenter of much work he had formerly done. Moreover, machinery reduced the amount of skill needed by the carpenter and opened up the trade to the "saw and hatchet" man — to unskilled workers.

The 1888 convention of carpenters refused to enter into an agreement with the Furniture Wood Workers' Union, which controlled the factory woodworkers, whereby the members of either union would be permitted to operate woodworking ma-

chinery. To definitely assert their claim, the carpenters chartered a number of local unions of factory woodworkers. From that time on, both organizations laid claim to the same work. In 1890 the Brotherhood of Carpenters extended their jurisdiction to planing-mill bench hands, cabinetmakers, and to any carpenter or journeyman operating woodworking machinery. In the same year the machine woodworkers separated themselves from the furniture workers and called themselves the International Union of Machine Wood Workers. The Brotherhood of Carpenters withdrew objections to having the American Federation of Labor grant the new union a charter, and conceded it jurisdiction over all machine and all bench hands.[20] But they refused to concede to the Furniture Wood Workers complete jurisdiction over cabinetmakers. In the following year the Machine Wood Workers and the Furniture Workers amalgamated under the name of Amalgamated Wood Workers' International Union of America.

The carpenters foresaw the danger to their control if the Wood Workers' Union were allowed to exist and grow, although by an agreement in 1897 they recognized the jurisdiction of the Wood Workers' Union over all millhands, except carpenters who may at times be engaged in millwork, or millwrights and stair builders. The Brotherhood members who were already employed in planing mills were to remain in the organization, and the carpenters were conceded jurisdiction over all outside carpentry work.[21]

Peace did not last long, however. At the convention of 1898 the Brotherhood of Carpenters abrogated all agreements with the woodworkers.[22] In 1901 the woodworkers took the matter to the American Federation of Labor convention, and asked for "full and sole jurisdiction over all factory wood workers." [23] Typical conferences followed. In 1902 the Federation granted the woodworkers' sole right to the work, on the ground that the carpenters already had conceded that jurisdiction to them in the agreement of 1897, and that prior to 1898 the carpenters

had made no effort to control woodworkers. The carpenters had admitted that the extensive introduction of machinery forced a change of policy upon them. As might have been expected, the Brotherhood refused to accept the award, which would have compelled them to turn over to the woodworkers 30,000 members.

The carpenters offered amalgamation of the two unions as a solution. In the meantime they made many inroads into the membership of the Amalgamated Wood Workers. By 1908 the membership of the latter was reduced to 7000 and "two thirds of these are desirous of joining the Brotherhood of Carpenters because they realize the hopelessness of their condition." [24]

Employers, greatly disturbed by the warfare, asked the American Federation of Labor for relief. The Federation, after trying to be fair to both sides, succumbed to the more powerful union and recognized the inevitable. Instead of recommending conferences as it had previously done, it *ordered* the Wood Workers to amalgamate with the Brotherhood of Carpenters before January 1, 1910.[25] The Wood Workers refused, and the Federation revoked its charter. Through President Gompers' influence the two organizations were finally amalgamated in 1912. A fundamental technical change had resulted in the introduction of machinery which threatened to wipe out a union, and, in the struggle for existence, the Brotherhood of Carpenters got exclusive control of the woodworking industry, irrespective of the justice of other claims.

(c) *Changes in Construction Methods.* Changes in industrial methods also produce frequent jurisdictional conflicts. These changes result in new divisions of labor and bring about a variation in the methods of doing the work in different localities and among different contractors. A generation ago the mason cut and set stone, but at present, in nearly all sections of the country, this work is divided into two trades. The Granite Cutters and the Stone Cutters continually complain that the masons

(belonging to the bricklayers' union) disregard the divisions between stonecutting and stone setting. Masons also complain that stonecutters set stone as well as cut it.[26]

Customs of doing work in different communities are just as potent a cause of disputes. Contractors or workers moving into a new territory bring with them the methods prevalent in the former place. For example, the Sheet Metal Workers and the Structural Iron Workers dispute the erection of steel sheeting. The customs in this respect differ for different communities. It was frequently decided that the union having possession of the work in any locality should retain it. But in those districts where possession was disputed, the union receiving the highest rate of wages and best working conditions should control the disputed work.[27]

(d) *Aggressiveness of Unions.* Many disputes result from the tactics pursued by organizations intent upon extending their control over related trades. Such disputes arise where there is a close relationship between trades, and one union is stronger than another. Many of the disputes between the bricklayers, tile setters and marble workers, and between the ironworkers and carpenters, could be placed in this category, although technical changes played an important part.

The dispute between the plumbers and steam fitters was recognized as one of the most stubborn in the building industry. Prior to 1889 plumbers and steam fitters belonged to the same union, but in that year separate organizations were formed: the plumbers installed lead pipes and the steam fitters iron pipes. But gradually the use of lead pipes decreased. By 1900 trouble between the two organizations became pronounced.[28] Attempts at settlement passed through the various channels of the labor movement until they reached the American Federation of Labor convention in 1911. The convention ordered amalgamation. The steam fitters refused, and their charter was revoked in 1912. By 1913 most of the steam fitters had joined the plumbers' union, and the two organizations were

finally combined. The expectation that amalgamation would forever remove conflicts between related trades was partly dispelled by the experience of these two unions. Joining the disputing trades under the same International Union failed to protect the employers against jurisdictional strikes. Numerous stoppages occurred after 1913, both trades continuing to trespass upon each other's jurisdiction. In New York City in 1921, a large construction job — the Hell Gate Power House — was tied up for months until these two locals could make some settlement.

The dispute between the masons' and the stonecutters' union lasted for many years before the larger union won. To a layman some of the distinctions between trades would appear absurd.[29] The marble workers sought to set interior dimension stonework which the bricklayers claimed. Numerous attempts to settle the conflicting claims failed. When the dispute held up the Terminal Building in Kansas City for five months, the bricklayers secured a promise from the Marble Industry Employers' Association to hire only bricklayers for this particular work. When the Bricklayers' Union was criticised for enlisting the aid of an employers' association in fighting another union, they defended their act by the claim that specialization breeds new unions which usurp the work of the mason trade.[30] Peace negotiations followed, but it soon became clear that the bricklayers were aiming at amalgamation of the two trades. The Building Trades Department supported the marble workers, and advised all trades to cease work on buildings where bricklayers installed interior marble work. This aid was ineffective, and gradually marble workers joined the bricklayers' union and what was left of the old organization soon amalgamated.[31]

The dispute between the Bricklayers', Masons' and Plasterers' International Union and the Operative Plasterers' International Association was settled in August, 1927, after more than twenty years of intermittent disturbances. Theoretically, this was not a jurisdictional dispute, but rather a dispute over

a division of territory in which each union was to have control. The bricklayers' union admitted plasterers to membership only in localities where the number of the latter was insufficient to form an exclusive plasterers' union. For forty years the bricklayers' union never chartered an exclusive plasterers' local, although many of its members did plastering exclusively.

The Operative Plasterers' International Union objected to the inclusion of plasterers in the bricklayers' union.[32] After many fruitless conferences and the rejection of an amalgamation plan, the unions reached an agreement in 1906 providing for an exchange of "working cards." In 1909 this agreement was renewed. A year later, however, the bricklayers abrogated this agreement on the grounds that the plasterers' union did not coöperate with them in opposing unfair contractors. In the meantime, the bricklayers expanded the name of their organization to include the word "Plasterers." [33]

In 1911, however, the reciprocal agreement was renewed, assigning the territory for each union and stipulating that whenever two-thirds of the plasterers resident in a town, belonging to the bricklayers' local union, voted to separate themselves, the Operative Plasterers' Union should grant them a charter. The 1911 agreement was amended in 1916, when the bricklayers gained control over the tile setters. But disputes over its interpretation arose, and each union in retaliation for alleged violations abrogated its agreements. Nor did the decision of the Jurisdictional Board in February, 1923, end the struggle. The effect of this situation upon employers was most injurious in the disputes during 1925. If the contractors sided with the plasterers, the bricklayers struck; if they sided with the bricklayers, the plasterers struck. This warfare tied up approximately three hundred million dollars' worth of construction in all parts of the country.[34] The George A. Fuller Company tried to force the issue by employing 150 nonunion bricklayers. It was a bold move and soon collapsed in a complete surrender by the Fuller Company.[35]

In 1925, through pressure from President Green of the American Federation of Labor and several large building-trades employers, both unions agreed to submit the evidence to Elihu Root for arbitration. The award reëstablished the 1911 agreement, but soon both unions charged each other with breach of the award. Peace was restored in 1927.[36]

(e) *Dual Unions.* The underlying basis of this dispute was dual unionism. Both unions claimed control over plastering; both admitted plasterers into their organization. Many are of the opinion that the dispute will not be ended until one of the contestants is eliminated through amalgamation.

One of the most spectacular struggles of this nature was that between the United Brotherhood of Carpenters and Joiners and the Amalgamated Society of Carpenters and Joiners, founded in Great Britain in 1860 with branches in the United States. At no time did the Amalgamated Society's membership in this country exceed 10,000. The "English Carpenters" were not hostile to the Brotherhood, formed in 1881, although they considered it a dual union. However, the friendship was brief. Before long each union charged the other with "scabby" tactics and unfair practices.

Numerous local and national agreements were made between the two organizations, only to be disregarded at the first opportunity. At the 1902 convention of the American Federation of Labor, the Amalgamated preferred charges against the Brotherhood for "unfraternal spirit." Bitter feuds existed in New York, Buffalo, Pittsburgh, Cleveland and Niagara Falls. The Brotherhood urged that the Federation take a firm stand against dual unionism, and it threatened to withhold its per capita tax until the charter of the Amalgamated Society was revoked.[37] Amalgamation was the only basis upon which the Brotherhood would negotiate peace.

The 1903 strike and lockout in New York, involving over 100,000 building workers, were a direct result of the conflict between these two organizations. When the lockout was over,

the Brotherhood accepted the terms of the employers, thereby securing exclusive control of the New York market. In 1905 amalgamation was agreed upon by the two unions. Adolph Strasser, President of the Cigar Makers' Union, was appointed to draw up the terms. The Strasser award gave lenient terms to the Amalgamated Society, allowing it to retain some of the benefit provisions, which were an important feature of the English organization. But while the British organization voted to amalgamate on the terms of this award, the Brotherhood of Carpenters thought the terms too lenient to their opponents and rejected the amalgamation plan.[38] In 1912 the American Federation of Labor drew up a plan of amalgamation which both sides promised to accept. But the Amalgamated Society later refused to accept the terms, and the American Federation of Labor revoked its charter. The Amalgamated, wishing to protect the benefit features of its older members, accepted amalgamation under a compromise arrangement.

This was not the only contest which involved dual unions; but in few other instances were the disputes as long and costly, not only to the contestants directly involved, but also to other labor organizations and employers. These disputes are fought more stubbornly than those caused by technical changes in methods and materials, because the existence of one of the disputants is at stake.

(f) *The Claims of Industrial Unions.* Another group of disputes of secondary importance arises between unions in the building trades and unions in other industries. The carpenters' union and the brewery workers' union contested for control over carpenters working in breweries. The latter union was an industrial organization claiming jurisdiction over all employes in a brewery. But the carpenters held that their members "could not be forced to join any other union when they are working at carpenters' work, regardless of where they are working or by whom they are employed." The brewery owners could not afford to fight with either organization, so they substituted metal beer boxes for wooden boxes.[39]

Several building-trades unions contested with the Theatrical Stage Employes' Union the right to control building-trades workers employed in the motion-picture industry.[40] Similarly, the miners' union, an industrial organization, wanted control over carpenters working in mines; but such disputes have never been very important.

3. Conclusions

The influence of jurisdictional disputes upon the nature of industrial relations in the building industry is manifold. The causes are found not only in the technological changes constantly taking place, but also in the subjective and psychological reactions of workers and union leaders to these changes. But while the latter have played a prominent rôle in several important struggles, the most important of these conflicts resulted from changes in industrial methods. Since the outlook points to an increase in these changes, brought about by constant experimentation with new methods and materials, there is little likelihood that jurisdictional disputes will be reduced in quantity or severity by the removal of the conditions which produce them.

This situation, coupled with the highly unstable character of the industry's employment, which produces a scarcity of jobs for several months each year, greatly intensifies the competition for jobs on the part of the workers. Jurisdictional rules are thus a device for reducing the number of claimants to a particular class of work, and jurisdictional disputes may, in this sense, be looked upon as an effort by an aggressive and militant group of workers to protect their working conditions against other competitors. The struggle is at times provoked by competitive efforts of employers to substitute workers of one union having lower wages for the workers of another union having higher wages.

CHAPTER VII

ADJUSTING JURISDICTIONAL DISPUTES

A JURISDICTIONAL dispute was once believed to be the concern only of those directly involved. However, when such inter-union wars tied up a building program of an entire city, and often, as in the case of the dispute between the bricklayers and plasterers, threatened the construction program of the nation, other groups outside the labor movement became interested. Architects and contractors became insistent that organized labor find a remedy for this difficulty. But most concerned was the labor movement itself. While individual leaders of unions may have used these conflicts for personal advantage, or even have "manufactured" disputes to exact financial tribute from contractors, there can be no doubt that organized labor as a whole sought relief very sincerely. Numerous methods and agencies to handle jurisdictional disputes were tried.

1. Methods of Settling Jurisdictional Disputes

While it is more desirable to prevent jurisdictional disputes than to remedy them, the continued mechanization of the industry makes such prevention unlikely. Pressure will be exerted by employers to shift more work to the lower-paid unskilled trades. This will lead to greater rivalry among the skilled trades for the remaining work. The remedy lies either in changing the organization of labor or changing its attitude toward decisions of jurisdictional boards.

(a) *Settlement by Local Building-Trades Councils.* Before the development of strong national unions with power centralized in the national officers, jurisdictional disputes were settled by the local unions. These were often only temporary

truces. With the establishment of the central building-trades councils, the task of adjustment was assumed by these bodies, and in many cases accomplished successfully. Thus, the San Francisco Building Trades Council, governed by the iron rule of P. H. McCarthy, was able to handle this question with little difficulty, although its methods were alleged to have been not above criticism.[1] But whatever doubts might have arisen as to the propriety of these, the fact remains that the employers in that city had little complaint on the score of jurisdictional disputes. The Jurisdictional Committee of the Building Trades Council learned of disputes at their inception and gave its decision when it had gathered all the relevant information. While the committee was deliberating, the unions remained at work. If a union did not abide by a decision, it was duly punished, either by a sympathetic strike of other unions against it, which was, of course, sanctioned by the Building Trades Council, or through the formation of a dual union. As a result, jurisdictional strikes were probably less frequent in San Francisco than in any other unionized city.

With the exception of a few disputes involving national unions and national issues, the New York arbitration system handled its jurisdictional disputes with a fair degree of success.[2] A joint arbitration committee or an umpire settled the question and the decision was binding. Both sides agreed to discipline members who refused to abide by the decision, and in most instances the award was accepted. The employers' association supported the arbitration board enthusiastically.

Where either the employers or the workers were not completely organized, the settlement of jurisdictional disputes was a difficult task. The Chicago experience illustrated this situation.[3] Before 1900 labor was thoroughly organized, but not the employers. Between 1900 and 1910 the employers were organized, but the unions were weak. After 1910 both sides were more or less thoroughly organized, and in 1913 the first effective agency for handling jurisdictional disputes was set up.

Here, however, success was less apparent because there was a lack of stability in industrial relations. The type of local leadership and the close supervision of the local unions by their national organizations may account for the failure.

(b) *Settlement by National Unions.* In the interests of uniform practice, the national unions sought to deprive the local organizations of their power to settle jurisdictional disputes. When the jurisdiction of a trade was questioned, the matter automatically went to the national officers of the contesting unions. The resulting agreement was applicable to the entire country. When locals deviated from policies so established they were subject to expulsion. The Building Trades Department urged that local decisions should be superseded by national decisions. But this program was opposed by employers and unions in those centers where successful local machinery had already been established. New York and San Francisco were seldom enthusiastic supporters of the national unions and they would not countenance their decisions being overruled by some national tribunal.

This attitude raises several questions: Are local settlements more feasible than those made by a national tribunal? Can jurisdictional disputes be settled on a national basis and the decisions be applied effectively, with only minor modifications, to all centers?

The employers and local unions in New York contend that they have many jurisdictional problems which are purely local. Many of the existing local conditions and practices are of long standing, having grown up in that city only, and are not duplicated elsewhere. No national decision could be fair to all places in the country. Not only trade differences but differences between open-shop and closed-shop centers are vitally involved in these decisions. The New York building industry, for example, has more specialty trades than that in any other city in the country. In many cities plasterers, bricklayers and cement masons belong to one union. In New York each has

its separate organization. In New York the steam fitters do sprinkling fitting; in Chicago this work is controlled by a separate organization of sprinkling fitters. In Pittsburgh the plumbers do gas fitting, and in Chicago there is a separate gas fitters' union. In New York there is a house shorers' and movers' organization which exists nowhere else. In short, New York City employers contend that to have a decision apply to the entire industry or throughout the country is neither feasible nor practical. The best that can be done — and that, they claim, is only a makeshift — is to set up certain territorial zones with flexible rules covering special conditions.

Officials of national unions regard New York's attitude as stubborn "localism." The national unions can ill afford to accept such a policy. To them a local union represents but a fraction of an entire organization. To maintain their control and facilitate dealing with local conditions, it is necessary to standardize the jurisdictional claims throughout the country. The national unions are gaining control over the settlement of jurisdictional disputes, and the situation in New York is no longer typical for the rest of the country.[4]

(c) *Intervention by the American Federation of Labor.* A dispute arising between two national unions is settled by them through conference or arbitration. The decision is embodied in a national agreement. But there are instances when the national unions involved are unable to agree on a settlement. Conferences are not always effective, especially if the strength of the parties is not equal. Witness the Amalgamated Society of Carpenters and the Wood Workers in their disputes with the Brotherhood of Carpenters; the marble setters, tile layers and cement workers in their disputes with the bricklayers; and the steam fitters in their dispute with the plumbers. All were absorbed — or, to use the official term, amalgamated — by the stronger union.

In situations where the national unions are unable to agree, someone must intervene to settle the fight or it continues until

one of the parties surrenders. Before the Building Trades Department was organized, the executive committee of the American Federation of Labor adjusted jurisdictional disputes when the unions involved could not agree among themselves. It also attempted to forestall conflicting jurisdictional claims by providing that "no charter shall be granted by the American Federation of Labor to any national, international, or federal union, without a positive and clear definition of the trade jurisdiction. If there is a trespass on the jurisdiction of any affiliated union, no charter is to be granted without the written consent of the existing union." [5]

But the Federation was composed of too many conflicting groups to insure the unions in the building trades any of the special attention which they needed. To provide this, the 1900 convention of the Federation decided to establish a special section of the building trades to which all disputes affecting these unions were to be taken. This, however, brought little improvement. Agreements could not be reached, or, if concluded, decisions were frequently disregarded.

The conference methods used by the Federation of Labor possessed inherent defects. The Federation had very limited power in dealing with the autonomous national unions. President Gompers once declared: "Inherently an international union is sovereign unto itself, and our Federation can rightfully exercise only such functions as are delegated to it by the component parts which have instituted it and which constitute its makeup." [6] At times the affiliated unions realized the weakness of this arrangement and agitated for a change in the constitution which should give the Federation full power to render a mandatory decision on questions of jurisdictional disputes. President Gompers always opposed mandatory decisions. Many years later, when the Building Trades Department requested that the carpenters be expelled from the Federation for refusing to obey a jurisdictional decision of the Department, President Gompers said: "The history of the labor movement

demonstrates beyond a doubt that to revoke charters, suspend organizations, enforce compulsory obedience to edicts and decisions, have invariably led to a rebellious spirit resulting in bitter conflict, relentless antagonisms, and disintegration. . . . The only discipline which the labor movement can countenance is that which is self imposed." Revoking charters or suspending unions "will neither harmonize existing differences or bring the members of an international union so suspended into a better frame of mind in order that an award may be accepted by them." [7]

(d) *The National Building Trades Council.* The Federation's inability to handle jurisdictional disputes created a demand for an organization which would devote all its time to building-trades unions. In December, 1897 the National Building Trades Council was formed to provide some kind of central machinery for adjustment of disputes.[8] It was expected that in compelling the unions to submit a statement of their jurisdictional claims, strife among the building-trades unions would be eliminated. Once the Council had conceded the jurisdictional claims of any affiliated union, it would not admit into its ranks any other union with similar claims. The constitution provided that "in the event of any disagreement of any nature between the members of two or more affiliated organizations while employed at the work of construction . . . they shall not be allowed to stop work or in any way injure the interests of the employer." All differences between trades and disputes over questions of jurisdiction must be settled off the job, "in the halls of the unions concerned, by committees representing the disputing crafts, or to be referred to the Council for adjustment; and until such adjustment is effected the men engaged in the dispute must continue work, refraining from outward show of antagonism, and must avoid involving the employer in any way in such matter, in which he has no interest, nor is a party to, nor responsible for." [9]

(e) *Structural Building Trades Alliance.* The new Council failed to secure the support of the large unions and was opposed by the American Federation of Labor. Its successor, the Structural Building Trades Alliance, was formed in 1904 by nine leading trades which had not supported the former organization. Its aim was to guarantee to the different branches of the building industry "control over such tributary trades as by right, legally and technically belong to the main basic trades of the building line . . . to award to each association rightful jurisdiction of new and improved methods of construction or installation of any division or subdivision of existing established basic trades." The new organization dedicated itself to driving out dual unions in the industry and preventing the formation of new unions on account of technical changes.[10] The Structural Building Trades Alliance was opposed by the small unions, who feared that the new combination would "gobble" them up. Moreover, the American Federation of Labor refused to support any movement outside its own ranks. Both experiments in federating the unions in the building industry failed utterly either to reduce the number of inter-union disputes or to protect employers from the consequences of these.

(f) *The Building Trades Department.* At the 1907 convention of the Federation it was apparent that it must sponsor and support an organization to deal with building-trades matters exclusively. The Building Trades Department was established. Having received the blessing of the Federation, all the unions joined, and it appeared as if the building industry could thenceforward be protected from the ravages of jurisdictional strikes. Membership in the Department was made compulsory and officials were given control over local councils. Each trade was required to submit a written statement of its jurisdiction, and, when this was allowed by the Department, no encroachments by other trades were to be countenanced. It aimed to guarantee to the various branches of the industry the control

"over such work as rightfully belongs to them." "The great trouble is," declared one of the leaders of the movement, "that we have all arranged our jurisdictional claims among ourselves and [we] then went out with a chip on our shoulders to fight for what we are pleased to call 'our rights,' in our selfishness never considering the other fellow's rights at all . . . I can pick out four trades that if their claims were allowed in full, as per their constitution, there would be little use for any other craft on the job." [11]

The aid of the Department in settling disputes was invoked at the point where the national unions failed to agree. The award made by the convention of the Department was final and binding upon all parties. The 1911 convention of the Department determined upon a more stringent control of the disputes, aiming primarily to eliminate strikes and stoppages and to secure a settlement before harm was done to the employers. The new arrangement provided for a Board of Arbitration consisting of three men, one selected by each of the contending parties and one by the President of the Department. Its decision was to be binding and no strikes were to be allowed pending its announcement. All decisions could be appealed to the convention of the Department. In 1917 the Department transferred to its president all the powers of this board,[12] having in the meantime discovered that little could be done to secure an agreement between disputing organizations.

During the next few years the number of jurisdictional strikes decreased. That the Department could not prevent all disputes was no discredit to its efforts. The ever-changing conditions and methods of construction, the real basis of these disputes, were beyond the control of any organization. However, the Building Trades Department was handicapped by its inability to enforce decisions. Its experience with the Brotherhood of Carpenters and Joiners illustrates this situation. The Brotherhood's importance in the industry gave it power and prestige sufficient to overcome, if not to overawe,

opposition to its claims. How could such a union be disciplined?

In their dispute with the sheet-metal workers, the carpenters refused to compromise or arbitrate except upon their own terms. In their dispute with the machinists, they were convinced "that the Department was dominated by our enemies . . . they have been trying to do their best to rob our craft of that part of the work which rightfully belongs to us," [13] and, at the convention of the American Federation of Labor and the Building Trades Department, "there was a solid alignment against us . . . all matters were decided against us by practically the same vote." [14] To enforce its decision the Department tried to use pressure on contractors and architects and also to secure the expulsion of carpenters' locals from the local building-trades councils. The carpenters' decision to "discontinue the payment of any more money into the Building Trades Department" may in part be responsible for the latter's change of policy in favor of the carpenters.

The Department was in an embarrassing position. On the one hand, it tried to retain the support of all the building-trades unions, and on the other, to enforce its decisions. In 1913 it reversed itself in order to hold the Brotherhood of Carpenters, and in 1922 it supported the Board of Jurisdictional Awards and lost the Brotherhood. The American Federation of Labor, opposed to the expulsion policy, would not support the Department in any drastic action against the carpenters. The Department could not enforce its decisions, simply because the strongest union refused to accept such decisions.

2. Causes for Failure

Arbitration is an integral part of these six methods of adjusting inter-union disputes. The Department of the Federation as well as the local councils may resort to arbitration when conferences fail to bring the dispute to a conclusion. When the dispute is submitted to a convention of either body, it is really

submitted to arbitration, with the exception that the arbitrators are parties to it or vitally interested in it. Frequently a third party is chosen to adjudicate the dispute.

There are also permanent arbitration systems in New York, Chicago and other cities. In New York the arbitration principle was forced upon the unions and maintained by a strong organization of employers. Elsewhere it is usually a failure. The decision cannot be enforced and opposition from the national unions is usually encountered. Another weakness of the method is the unions' lack of confidence in an arbitrator's ability. The time at his disposal is limited; he either does not or cannot understand the complex technical points involved sufficiently to render an intelligent opinion. If he is a fellow unionist and conversant with the nature of the disputes, his natural bias eliminates him as an arbitrator.

Although numerous methods had been tried, to the close of the war period, no definite progress was made in the solution of the jurisdictional dispute. Ineffective enforcing machinery was only one difficulty. The narrow and shortsighted leadership of some unions prevented a saner approach to the subject, and the feeling of one employer that "until very recently it would not have been difficult to obtain the impression that there was not any very serious desire to clear away the jurisdictional dispute," [15] is quite generally held.

At the close of the war the unions met an entirely new situation. The war period brought on a depression in the building industry. Patriotism and war demands prohibited strikes and jurisdictional disputes. After the war exigency, the problem became intensified by the necessity of reducing building costs and meeting the large building needs. War operations taught the unions that a better and more stable organization could be effected and the inter-union fights settled. Of one thing they were certain, that all the methods previously tried failed in major cases; that in any crucial test the machinery of adjustment broke down. Jurisdictional disputes thus far were a

"family fight." No one outside of the labor movement intervened in their settlement. The contractors participated only where local machinery functioned. But they were not officially represented in any national agency of the Building Trades Department or its predecessors.

3. The National Board for Jurisdictional Awards

A new approach was necessary. Labor began to concede that other groups outside its ranks had a vital interest in the problem.[16] Moreover, it was apparent that jurisdictional decisions could not be enforced without the aid of contractors and architects.

(a) *Organization.* In the autumn of 1918 a series of disturbances aroused the interest of many groups. Those who had experience in war construction work remembered the principles of joint relations then practiced, and desired to carry them over to times of peace. It was with this end in view that a committee from the American Institute of Architects appeared before the Building Trades Department to proffer its assistance toward settling jurisdictional controversies. This was the first constructive approach to the problem.

A plan of organization was adopted. The entire industry — labor, employers and the professional groups — were to be represented in a "supreme court of the building industry." The importance of this movement cannot be overemphasized. It was the first time that organized labor permitted, even invited, "outsiders" to assist in the solution of what had previously been regarded as private fights.

(b) *Functions.* On March 3, 1919, the National Board for Jurisdictional Awards was created.[17] The Board's power was limited to adjudicating jurisdictional disputes between union workers and their employers only. At least two-thirds of the voting members of the full Board were required to render a decision. Occasionally, however, it happened that some member

of the Board was immediately interested in the controversy, and under the constitution he was not permitted to vote or join the discussion in executive session when a decision was being made. Any interested party — labor, employers, manufacturers or architects — could present evidence at a hearing, and the Board could call in an expert to testify.

Any award of the Board could be reheard if six of the nine members favored it. Strikes, pending decisions, were prohibited. When a dispute arose, an employer had the right "to proceed with such workmen as in his judgment he may see fit to employ pending a decision of the Board; but the right of any contestant to the dispute shall not be prejudiced in its claim for a final award." Stoppages occurred, however, because of misunderstanding as to the meaning of the Board's decisions. To correct this difficulty, any member of the Board was empowered to interpret its decisions, subject to review by the entire Board.

Decisions of the Board became effective at once. If trade agreements existed to the contrary, these remained inviolate until the date of their expiration. Work affected by decisions could not be transferred from one trade to another during construction, or on previously executed contracts for such work, provided it was started within three months from the date of the decision.

Each signatory to the agreement obligated itself not to participate in sympathetic strikes during any jurisdictional dispute. To secure support for the new arrangement, it was provided that "local organizations, refusing compliance with the agreement establishing the Board and the awards, shall be suspended from their international organization," which "shall proceed at once to man the job and the employer shall coöperate with the international organization in so doing." Further, "any architect, engineer or employer represented on this Board through an organization signatory to this agreement shall be suspended from his organization upon failure to comply

with the provisions of this agreement and the awards of this Board." [18]

To avert jurisdictional strife, it was urged that new materials, specialties and methods of application should be passed upon by the Board before being assigned to any trade, provided that six members of the Board agreed that the subject had not been previously covered. It appeared that with this program a method had finally been devised to end the most serious of these disputes.

(c) *Activities.* The Board had much to do. It promptly settled an ancient feud between the Sheet Metal Workers and the Plumbers and Steamfitters over assembling air-cooling machinery. The Plumbers and Steam Engineers accepted a compromise decision on an old dispute. The Iron Workers and Plumbers settled an old question of the installation of "threaded pipe." The Board decided in favor of the Plumbers without a "comeback" from the Iron Workers. The Plasterers and Lathers concluded a long fight on placing corner beads. (The decision was in favor of the plasterers.) The old fight between the Iron Workers and the Lathers on the placing of reinforced rods in concrete came before the tribunal and was awarded to the Iron Workers. A dispute between the Electrical Workers and the Elevator Constructors as to who should do the electrical work in connection with elevators was compromised. The Bricklayers and Painters brought up the question of installing vitrolite, or opaque glass, and the work was given to the bricklayers. The dispute between the same union and the Iron Workers over the operation of stone derricks was dismissed when both unions expressed a willingness to agree privately.

"The work of the Board," wrote its chairman a year after its organization, "proceeds satisfactorily and there is a feeling among the labor men that the work of this Board will be very helpful in adjusting differences and in avoiding trouble especially in the way of strikes.[19] But later he had occasion to ob-

serve that "there appears to be a tendency on the part of the contending unions to delay consideration and the settlement of disputes where either of the parties seem to think that it would be to their advantage to have the decision delayed."

The carpenters, particularly, felt restive. A majority of the cases before the Board were controversies involving them. When the Board for Jurisdictional Awards was established, it was expected that the dispute involving metal trim would come up. Undoubtedly, the carpenters did not relish the prospect of a decision on this question. It was not unexpected that the Board, with the weight of official decisions favoring the sheet-metal workers, would accept these precedents and award the erection of metal trim to the Sheet Metal Workers' Union. Because of this possibility, the carpenters, though they participated in organizing the Board, were not particularly concerned about its success or its prestige. It was not unnatural that an organization which had been able to secure its jurisdictional claims for a period of thirty years without compromising any important demand, should refuse whole-hearted support to a movement which might curb its activities.

Friction arose almost from the start. The carpenters were the last to approve the Board (on July 24, 1919). In October, 1920, the secretary of that organization wrote to the secretary of the Jurisdictional Board requesting the names "of the contractors who hold membership in the associations supporting the Jurisdictional Board, and also the names of the architects and engineers who are affiliated with those professional organizations, members of the Board. . . . We desire this information in order that our General Executive Board may be able to determine as to what their future course in this matter will be." In short, the carpenters sought to prove that only a small minority of the contractors of the country were affiliated with the organizations backing the Board; and further, that some of these were open-shop contractors. On November 30, 1920, W. L. Hutcheson, President of the Carpenters' Union, notified

Secretary W. J. Spencer of the Jurisdictional Board "that his organization cannot participate in any hearings of that body." Since that time the Brotherhood of Carpenters has not participated in the work of the National Board for Jurisdictional Awards.[20]

The question of the carpenters' attitude came before the 1921 convention of the Building Trades Department. Several unions expressed themselves vigorously in favor of direct action to compel all organizations to live up to the decisions of the Board. President John Donlin of the Department said:

> We must realize our complete interdependence. We are all a part of the same machine, and when any part of it is out of gear and not functioning properly, all parts are necessarily affected; consequently it devolves upon all parts of our machine to force proper function of each and every unit or part.
>
> The Board of Awards has now become a public institution and the public is intensely interested in its permanency. . . . Our future depends on our ability to maintain it. The future of this Board is the focal point to which the whole public is directed. As a supreme court it is indispensable.

The convention reaffirmed its allegiance to the Board and this was interpreted to be a direct challenge to the carpenters to obey the Board's decisions or take the consequences. As a result of the suspension of the carpenters, the 1922 convention of the Department requested the American Institute of Architects, the Federated American Engineering Societies, the Associated General Contractors and the National Building Trades Employers' Association — all members of the Board of Awards — to insert in their contracts for building operations a stipulation that the decisions of the Board would be observed, and that these organizations would refuse employment to any local union refusing to abide by the awards of the Board.[21] The international unions were instructed to order the expulsion of local unions from local councils for not complying with decisions of the Board. It seemed as if the entire building-trades labor

movement was on the warpath against the carpenters. The architects, engineers and general contractors signed the agreement to support the Board.[22]

At the same time no effort was spared to get the carpenters to reaffiliate with the Department. The carpenters agreed to reënter the Department if the Board would rehear the case. President Gompers appeared before the 1922 convention of the Department intending to ask for an approval of that agreement. But the entire situation became clouded by a resolution of the American Institute of Architects, which instructed its Board of Directors to draw up an amendment to the plan of the Board for Jurisdictional Awards in favor of the open shop.[23]

President Gompers was worried about the turn of events. "I say to you openly and candidly that I cannot ask the Brotherhood of Carpenters to come back and place their case before a body that declared for the open shop." This situation somewhat strengthened the carpenters' position. In 1923 the carpenters rejected other efforts to induce them to reaffiliate, and declared that "until such time as the Department changed its affiliation with the National Board for Jurisdictional Awards it would not be possible to bring about the affiliation of the Carpenters with the Department." [24]

In spite of the unsatisfactory situation with the carpenters, the exponents of the Board were greatly encouraged with its progress. Fewer cases of disputes appeared than ever before, and it looked as if the brakes had been applied to inter-union controversies. Secretary Dobson of the bricklayers' union said as early as 1922:

> I consider the creation of the National Board for Jurisdictional Awards as the greatest and best piece of constructive work that has ever been adopted by the building trades of America. . . . For years the Department was a nonentity, its machinery was clogged as a result of political manipulations, by one set of men scratching the others' backs when it came to a question of settling disputes.

No matter what decisions were rendered by these political manipulations . . . not one organization ever subscribed to any decision rendered by the Department.[25]

In seven years the Board rendered more than one hundred decisions affecting major and minor jurisdictional disputes. On the whole these have been accepted, saving the industry untold millions in construction costs. It has been authoritatively stated that jurisdictional strikes have been reduced 80 per cent below any comparative period prior to the organization of the Board. To have existed for seven years in spite of the opposition of the carpenters was in itself a sign of strength.

(d) *Weaknesses.* Besides the opposition from the strongest labor union in the building industry, the Board had to contend against other obstacles which contributed to its abolition in 1927.

(1) "*Localism.*" As soon as the Board was organized, the opposition of several local groups made its appearance. New York unions and employers refused to discard their local machinery and submit to national control over jurisdictional disputes. They feared that the Board would immediately abolish all the local practices and proceed to enact new ones in accordance with some uniform scheme. Consequently the Board had to contend without their support, a fact which checked its effectiveness considerably.

(2) *Open-Shop Centers.* The organizations affiliated with the Board consisted of employers', engineers', and architects' associations whose members operated in open- and in closed-shop building centers. By their pledge to support the Board, these associations were obligated to make their members live up to the Board's decisions. The danger of dissension in their ranks was believed averted by a constitutional provision limiting the application of the plan to union labor and its employers only. But friction was frequent; the national organization, to keep its own membership intact and satisfied, could not wholeheartedly support the Board. A number of times, several pro-

fessional societies discussed the possibility of severing their relations with the Board because it fostered the closed-shop principle. The architects' resolution in favor of the open shop was an example.

(3) *Test of Jurisdiction.* Another difficulty of no mean importance was the test the Board applied in deciding a union's jurisdiction. The New York plan sought to settle jurisdictional disputes on the basis of who already *possessed* the work. Thus the only proof a union needed was to show possession. The procedure of the Board was more complicated. There the issue was decided on the basis of who *ought* to do the work. No recognized standards were established. The employer always stressed competency. A union on the other hand often emphasized the material used. This was the basis of the sheet-metal workers' claim to metal trim. The carpenters argued that, since wood was displaced by metal trim, then they should erect metal trim. Finally, what tools were used was frequently the standard. The employers, at least in one case, pressed the argument that in the interests of economical production, the trade having the lowest wage scale ought to get control over the disputed work. Combined with these standards was the more important argument of political expediency. Bargaining was the most common way of settling jurisdictional disputes in pre-Board days. This method was by no means eliminated after the Board began to function. There was still too much logrolling in the determination of decisions. The feeling existed that if a union suffered in one decision, it must be placated in the next.

(4) *Lack of Machinery to Enforce Decisions.* The absence of effective enforcing machinery was of course typical of all systems for the adjudication of disputes. The Board had no power of discipline. It was a judicial body interested in the facts of a particular dispute. Enforcing decisions, the police job, was left to the unions themselves, through the Building Trades Department, and to the employers. When the Board sought to

enforce its decisions by requiring engineers and architects to specify in their contracts that the work was to be done in accordance with the Board's awards, several unions opposed this provision on the ground that it was compulsion. They held that while it was permissible to suspend local and national unions for noncompliance with awards, the proposed enforcement provision changed the voluntary scheme into a compulsory one. "The Board of Awards was founded upon the basis of voluntary agreement. Those who would not comply for any reason might be expelled, or denied the right of association, but there the power of discipline must end, as it should." [26]

(5) *Frequent Rehearings.* A more serious criticism of the Board was the practice of granting frequent rehearings and thereby creating a condition of instability, for it was not certain how soon a decision would be reheard or reversed. For example, a decision in favor of the electrical workers was later reversed in favor of the elevator constructors, and almost resulted in another union repudiating the Board. The political maneuvers of the unions were largely responsible for this. At another time a decision in favor of the bricklayers against the painters, in 1920, on the question of vitrolite, was practically reversed by the interpretation the Board gave it some three years later. But to eliminate rehearings would introduce other evils. The remedy seemed to lie rather in limiting the number of rehearings granted and increasing the interval of time between a decision and a rehearing.

(6) *Lack of Support.* If the Board had had whole-hearted support from architects and employers, it could have secured the enforcement of all its decisions. But building-trades employers were not primarily in business for the sake of principle. Nor would owners permit architects to make their building the battle ground for a principle in which they would have no more interest as soon as that building was completed. In one case a group of employers not wishing to invite the enmity of the carpenters' union, resigned from the Associated General Contrac-

tors to avoid supporting the decisions of the Board. Contractors doing a national business were particularly hesitant to antagonize the unions on account of their support of the Board.

(e) *Repudiation of Board.* The Board's organization and procedure were less important shortcomings than the hostile attitude of some union leaders on the Board. Union politics were reflected in the Board's deliberations and could not be excluded from its decisions. "We have for our part, made it clear," stated the *Bricklayer, Mason and Plasterer* editorially, "that the labor members . . . helped to bring the Board into disrepute because of log-rolling and ambition for empire. Labor members sitting as judges on the Board, have fought tooth and nail for what they held to be their own interests and have fought with equal ferocity for the interests of their friends and allies." The same Journal also quoted John Donlin, former President of the Building Trades Department: "I marvelled at the patience of those who volunteered to be of service in adjusting inter-union disputes, watched representatives of the American Society of Civil Engineers, of the American Institute of Architects, and of the National Association of Building Trades Employers, of the Associated General Contractors of America, who were outmaneuvered by the labor members of the Board whose interest was centered in their own craft and whose every thought and action was so actuated." And the editor of the *Bricklayer, Mason and Plasterer* continued: "They were as often actuated by a desire to strengthen and extend their own personal power and prestige as they are to extend membership and fields of employment." [27]

The Board could not overcome its shortcomings which were aggravated by the political turmoil in some unions plus the opposition of the carpenters. It was apparent that sooner or later the building-trades unions would have to choose between their allegiance to the Board and the need of support from the carpenters. At the 1927 convention of the Building Trades

Department the crisis came. The Department admitted the carpenters and simultaneously repudiated the National Board of Jurisdictional Awards. To prevent an upheaval in the jurisdictional claims of the unions, the department decided to continue all the decisions of the Board, with the exception of such awards as affected the Brotherhood of Carpenters.[28]

(*f*) *Constructive Results.* The seven years of the Board's existence demonstrated that jurisdictional disputes could be approached in a judicial manner. Stable conditions can only be maintained if permanent machinery exists for the purpose of dealing with such questions. The Board provided such machinery. The Department's repudiation of the Board before any suitable provision was made to continue its function received much merited criticism from the employers, architects and from some labor unions.

4. Amalgamation of Related Trades

All efforts discussed thus far to solve jurisdictional disputes overlook a fundamental difficulty. Jurisdictional disputes occur because more than one union claims control over a particular type of work. The obvious remedy is to have one union inclusive enough to control all the work in its trade. Fewer unions in the industry would prevent overlapping of trades. The method of achieving it is amalgamation, first of related trades, and then on a wider basis leading to some form of industrial union. Consolidation of related trades is recognized even by conservative leaders of the building trades.

The New York Arbitration Board in dealing with such disputes often recommended amalgamation of related trades, and in some cases the decision was obeyed. At the 1912 convention of the Building Trades Department, the executive council reported that for some time they had given "the most profound thought and study to the perplexing and delicate questions of consolidating some if not all the unions that are in their very

nature kindred organizations in the many crafts in the building industry."

Specifically, the committee suggested that "it would appear that where the so-called trade rights overlap, as for illustration in the wood working trades, the stone cutting trades, the pipe fitting trade, the structural sheet and fabricated metal trade, the painting and decorative trade, the plain and ornamental clay products trade, the composition plastic trade, and so on throughout the occupation sections of the building industry, the two or more unions obtaining in each section could by amalgamation, neutralize the disputant features . . . and thus bring to an end for all time discord in trade jurisdiction." [29] This broad program of solving jurisdictional disputes was endorsed by the 1912 convention of the Building Trades Department and the executive council was instructed "to bring about amalgamations wherever possible." However, the fear of the smaller trades that their interests would not be sufficiently protected, discouraged further action.

Amalgamation actually proceeds at a more rapid pace than the orthodox unionist appreciates. A few illustrations point out the progress. First of all, the large dual unions are already amalgamated. The Wood Workers and the Amalgamated Society of Carpenters are now a part of the Brotherhood of Carpenters, which is recognized as the exclusive union in the woodworking trades. In the masonry trade the same tendency appears. First the Tile Layers and then the Marble Workers became part of the Bricklayers' Union. Now, within the International Union founded by the bricklayers are gathered bricklayers, stonemasons and stone setters, plasterers and modelers, marble masons, tile setters, terrazzo and mosaic workers and cement finishers. The Cement Workers and the Plasterers have joined, and now the Bricklayers are charged with openly or secretly inviting the Plasterers to join them. As a result of this gradual process many of the smaller organizations have already been eliminated and the number of the larger unions

has been somewhat reduced since 1908, when the Building Trades Department was formed.

Surprisingly enough, the leading employers' organizations urge amalgamation of related trades as the only solution for jurisdictional disputes. In other industries, employers, as a rule, oppose amalgamation because it would greatly increase the union's strength.

Not so in the building industry. Wherever the unions have succeeded in getting a closed shop, the employers are eager to "mitigate the evils of unionism" by having as few unions to deal with as possible. Organized employers do not fear a strong union if it is conducive to agreements and stable conditions. It is not surprising, therefore, to find that building-industry employers propose an amalgamation program not much different from that proposed by the progressive group in the industry. One suggestion is to combine the related trades on the basis of the 1912 resolution of the Building Trades Department. This would call for one union of masonry workers, which would include bricklayers, plasterers, stonecutters and related trades; one union of metal workers, to include ironworkers, sheet-metal workers, plumbers, steam fitters and metal lathers; one union of woodworkers, to include carpenters, wood lathers and roofers. In this manner eight or nine basic unions would be organized around the material used instead of twice that number existing at present. While disputes would still occur between unions in the different divisions, it must be remembered that at present most contentions arise between related trades, belonging to separate international unions.

A more radical proposal is the "one big union" idea, with important modifications to meet the needs of the building industry.[30] The single union of all building-tradesmen would be divided and subdivided into departments and divisions consisting of different trades, but for purposes of policy and external relations it would be one unit. The program is based upon a greater degree of class solidarity than actually exists in

the building trades. The plan presents obstacles which are more potent from the point of view of an immediate program than the solutions offered by the more moderate groups.

Many of the organizations which have experimented with amalgamation report general improvement in the condition of the trade and a greater harmony among the crafts involved. In his report to the 1928 convention of the Bricklayers', Masons' and Plasterers' International Union, President W. J. Bowen, in describing the advantages of amalgamation, said:[31]

> The bringing of these various trades into one unit has proven advantageous to us, to the employers and to the building public. . . . Step by step amalgamation was brought about. Those who were most steadfast in resisting the logic of amalgamation soon became the warmest adherents of the policy. . . . Sporadic strikes have been eliminated. The members know what to expect when they report for work.
>
> Jurisdictional disputes, once such a prolific cause of dispute . . . have almost ceased to be regarded as disputes. Where there is a question as to who shall do certain work, the question is settled within the family. Classification of work in the trowel trades has ceased to be a thing to fight about. . . . So completely has this type of dispute disappeared where our trades are concerned that it would be a novelty if an open dispute over classification of work would occur and general amazement would follow. . . . No policy is more richly justified than the policy of amalgamation.

Obviously, amalgamation as a remedy for jurisdictional disputes has many limitations at the present time. The most important of all is the fact that none of the small unions favor amalgamation. On the other hand, the strong unions, the carpenters, bricklayers and other basic trades sponsor it. Such a solution would maintain the identity of the larger union but erase that of the smaller. That is why in the building trades, amalgamation is looked upon as a gobbling-up process. Thus far the unions accept milder schemes bordering on amalgamation, such as "exchange of cards," or maintaining membership in the two unions.

5. Summary and Conclusions

(*a*) *Class Dictatorship.* A review of the methods and devices employed for the solution of the jurisdictional dispute shows that no one particular method has solved the problem. Some of them, however, have exhibited considerable effectiveness at one time or another. The first of these can be called class dictatorship. This method is best illustrated by the experience of the building trades in San Francisco. Before 1921 the dictatorship of the labor unions, solidified by sympathetic action and one-man power which dealt severely with any union attempting jurisdictional encroachment beyond the decrees of the arbitration committee of their central council, barred jurisdictional disputes as "unethical," and a strong labor dictatorship successfully eliminated these conflicts.

In 1921 this labor dictatorship was overthrown by a dictatorship of the employers aided by the merchants and bankers of the community. This method has been successful not only in barring inter-union disputes but even in removing many of the uneconomic jurisdictional rules. Dictatorship, first of one class and then of another, has been one of the most effective devices for removing these controversies.

(*b*) *Collective Dictatorship.* But in localities where the two groups are fairly equal in organizational unity and organizing power, class dictatorship is of little avail. Here a collective dictatorship has solved the problem. This situation is best illustrated by the experience in New York City, where the strongly organized workers and employers through an arbitration program have removed the more serious of these disputes for more than a quarter-century. Here, the employers and labor agreed to discipline recalcitrant unions which disobeyed the awards, and they formerly went so far as to organize dual unions to take the places of the regular trade unions which were recognized by the American Federation of Labor. This collective dictatorship of the New York employers and unions has

been just as powerful as either of the two class dictatorships in San Francisco. It has successfully prevented jurisdictional strikes, arbitrated jurisdictional disputes, and enforced its awards.[32]

Under the same classification we must place all the arbitration systems devised for dealing with these controversies. Arbitration, when not enforced by the political power of government, fails unless the awards are backed by the economic power of the parties involved. And it is the unwillingness of these parties to use economic pressure against the offending union which has resulted in the failure of every important effort to arbitrate these disputes. The National Board of Jurisdictional Awards unsuccessfully sought to secure the coöperation of the affiliating organizations to the end of combining against the recalcitrant carpenters.

(*c*) *Voluntary Amalgamation.* A third method of preventing jurisdictional disputes is amalgamation. We have seen, however, that the success of voluntary amalgamation of related crafts has been very limited. The absence of class solidarity in American unions and the differences in wage rates and technical skill between the different crafts, as well as the presence of personal and psychological factors, have combined to prevent the general acceptance of amalgamation as a method of solving these disputes. On the whole, American unions still adhere to the craft form of organization and enter into relations with other unions on an industrial basis only upon the assurance that craft autonomy will be maintained.

(*d*) *Compulsory Amalgamation.* But greater success has been achieved by compulsory amalgamation. The Brotherhood of Carpenters and, to a lesser extent, the Bricklayers', Masons' and Plasterers' International Union illustrate this method. The Brotherhood began, twenty-five years ago, by the process of jurisdictional strikes, to absorb competing unions. First, they forced the amalgamation of a rival, the American branch of the British Amalgamated Society of Car-

penters and Joiners. Then, being threatened by a technological change which increased the amount of woodwork being done in factories, they absorbed the Amalgamated Wood Workers. Later, when metal products were displacing wood in modern building construction, they asserted and successfully defended their claim to the erection of the new material.

Other methods of compulsory amalgamation have been cited in the preceding pages. It is sufficient to have noted that only where strong economic power was present was it possible to settle disputes by amalgamation.

CHAPTER VIII

CONTROLLING THE JOB — WORKING RULES AND RESTRICTION OF OUTPUT

"WORKING rules" of the building-trades unions receive more criticism than those of other labor organizations. To these is attributed the origin of many uneconomic practices and undue restrictions on the employer's managerial initiative. In this industry union rules appear more prominent than in other industries because the labor organizations are more effective in controlling the job. It is perhaps true that employers are less opposed to having their workers unionized and to recognizing collective bargaining than they are to submitting to the rules which the unions impose in their efforts to protect wages, hours and working conditions.

But "working rules" are in themselves not an exclusive device of the labor union. Every organized group strives to achieve stability and, when that is attained, to protect itself and to extend its sphere of control. Organized employers develop working rules called "codes of ethics" or "principles of conduct." These aim to control members of the group; by raising the general level of competition, to make it possible for all members to participate on a plane of equality; to restrict the operations of the "price cutter"; and to protect the legitimate activities of members.

1. The Function of Working Rules

The union's working rules have a fundamental purpose not unlike that of the business man's, namely, to share and equalize opportunity. Both employer and employe seek protection against the unfair competitor. The price cutter in the commer-

cial field is as much a danger to the contractor as is the unorganized worker who accepts a wage below the "standard" to the union man. Both seek to prevent an oversupply of their commodity. Both view restriction of production and output as ordinary phenomena of business.

However, while many of the restrictive union regulations are paralleled by modern business practices, others are primarily protective devices and have no such counterpart. Such rules, though not "economically sound" from the employer's outlook, are sound policy from the point of view of preserving the union and protecting its members against the constant menace of the nonunion employer or of a rear attack by the employer who has already "recognized" the union. Fundamentally, working rules are a reaction to the insecurity of the worker in modern industry. Such insecurity arises from dynamic changes which occur — changes in methods of production, in business conditions and in management. Working rules tend to check the progress of these changes, to make the introduction of machinery gradual, to standardize the operations of management and to prevent a sudden shift in the workers' status. The rules are, in theory, therefore, conservative and appear to favor the status quo in the industry. It is on this account that employers fear unionism and its rules.

Even in unorganized industries there are unwritten customs, often surprisingly inflexible, which define the rights of the worker in relation to the work and to the employer. Deviations from such customs frequently result in resentment and finally in industrial conflict. Although such instances are rare, experienced factory managers testify that restriction of output is tacitly agreed upon even among unorganized workers. Where written trade agreements exist, customs are codified, and incorporated therein, or in the union "by-laws."

An analysis of the working rules of unions which employers classify under the term "restriction of output," shows that these seek to curb the dictatorship of the employer and to assert

the workers' right to participate in determining "working conditions." They are a manifestation of the "police function" of the trade union — an instrument of "protection and conservation" seeking to "insure justice against favoritism in the shop, to render equal distribution of work, to maintain production standards against both speeding up and sabotage, to enforce sanitation, to save the wage level from being undermined by special secret understanding, and to prevent illegal overtime." Many of these rules date back to the time when the changing economic environment threatened to deprive the workers of the bargaining value of their skill. In the contest between the dynamic changes of industry and the fundamental conservatism of skilled workers, the rules have developed from crude and temporary expedients to compromises — not, however, sufficiently flexible to adapt themselves to industrial progress.[1]

Depending upon the relative strength of the parties concerned and upon the nature of the activity controlled by the rules, working rules in the building trades, as in other occupations, are imposed either by the unions, or by the employers, or are arrived at jointly. The first was the case in San Francisco, for a quarter of a century before 1921. The strongly organized and federated labor unions were in complete control. They made the working rules, served due notice of these upon the employers and proceeded to enforce them. To labor dictatorship has now succeeded the dictatorship of the employers, and the organized workers have no collective power in the determination of working conditions.

The third method presupposes organization of both groups, with mutual recognition, consultation and discussion. The historical chapters of this study indicate to what extent the building-trades unions and the organized employers operate on this basis. Only in those cities where the employers are fairly well organized is real consultation the mode of procedure in determining working rules. Under such conditions, the rules

are often the result of compromise. This fact partly explains much of their crude character.

The inclusion of working rules in an agreement or in "by-laws" of a union is not in itself *prima facie* evidence of their enforcement. In pressing their claims to job control even the skilled unions are not uniformly effective. At any particular time, industrial conditions, the competence of union officials and the bargaining power of the union largely determine its attitude toward the enforcement of working rules. Vigilance is relaxed during times of severe unemployment when it is expedient for the union to avoid a test of strength. On the other hand, when its members are all employed and market conditions are favorable, the union diligently enforces working rules. Even here, however, no broad generalizations are permissible. Some unions will increase their vigilance during a period of depression in order to prevent employers from nibbling at the wage rate or from instituting practices which would endanger the position of the union. Nor is enforcement of rules uniform throughout the community. It is rigid on large construction operations in the central section of the city, more lax on suburban work, on small house construction. The same difference is found on comparing the large city and the small town, and the skilled and unskilled trades.

What ends do building-trades unions seek to accomplish by working rules? What are these rules, specifically? How regulatory or restrictive are they? What significant abuses have there been? To what extent do the economics of contracting make necessary these regulatory and restrictive policies?

2. Working Rules in the Building Trades

There is little dispute as to the functions of unionism. An examination of hundreds of union working rules and shop practices reveals a desire to protect several things of significance in a worker's life: the security of his job; his standard of living; his health; his chance for promotion; his bargaining power and

that of his union; and individual liberty in the shop. The devices to secure these ends are of diverse character. In no two unions are they exactly alike. They differ not only among various trades but also in different localities. For purposes of analysis these rules are discussed under the following headings:

Regulating the supply of labor.
Working rules and efficiency.
Rules limiting output.
Restricting machinery and labor-saving devices.
Limiting the initiative of management.
Prohibiting employer from working on the job.
Restricting worker from becoming employer.
Opposition to lumping and subcontracting.
Control over foremen.
"The full crew" — specifying the number of workers to be used.
Shop work versus job work.
Skilled workers for unskilled work.
Quality regulations.
Limiting the employer's right to "hire and fire."
Restrictions on materials.
"Scientific management."
Wage regulations.
Exclusive agreements.
Rules limiting contracting privileges of employer.
Jurisdictional rules.
Miscellaneous regulations.

It should be remembered that unions do not make these classifications. These are the effects rather than the purposes of the rules. The purpose of the rule prohibiting an employer from working at his trade, for example, may be to limit the supply of labor by allowing only those who are members of the union to work at the trade. Few policies are intended directly to restrict output. Even a definite limitation on the day's work is aimed chiefly at something else, such as the mitigation of unemployment. The following pages describe the more important working rules enforced in the building trades, discuss the issues

involved, measure the extent of the restriction and indicate the fundamental purpose in view.

3. Regulating the Supply of Labor

Rules in this classification are concerned with (*a*) entrance to the trade, (*b*) initiation fees, (*c*) the permit system and (*d*) apprenticeship regulations. Building-trades unions frequently enforce rigid admission requirements. The nonunionist and the public often find it difficult to reconcile these onerous admission regulations with membership campaigns. It is commonly believed that the initiation fees are purposely made high in order to exclude applicants. Abuses of this nature are frequent, although it is difficult to make a general indictment. At times unions refuse to publish the initiation fees; and at other times the fees published are not those charged. Many unions reduce them to small sums when organization drives are in progress. In some instances, they permit applicants to pay high fees on the installment plan. A fee determined by the national organization and set as a maximum above which local unions are not permitted to charge, is apt to be reasonable; but this arrangement is unusual. As a rule, the national unions merely suggest what the fee should be, and local unions modify it in accordance with local conditions.

In New York City, for example, the trades possessing substantial control over their jobs have had fairly high initiation fees. A study made in 1907 showed that four trades had initiation fees of $100 or over and five trades of $50 to $100, the average being over $50. The tile layers' union in 1914 charged $200, which it used for paying out-of-work benefits. The plumbers' union charged $350 in 1924.[2] The stonecutters regulate their initiation fee through the national office and limit the amount to $25, although nonunion stonecutters from other countries must pay $50. The constitution of the asbestos workers' union sets the lower limit at $35 and the upper at $100.

The national union of the painters fixes a lower limit of $3 and permits the locals to set the maximum limit. The Building and Common Laborers' Union, always beset with the problem of organizing the unskilled worker, provides a lower limit of $2 and prohibits any local from charging more than $15. The operating engineers' locals may set their fee at any sum over $20. In 1914 the New York carpenters charged $20. In 1927 the initiation fee was $50 for nonunion men and $75 for ex-members who rejoined the union. The initiation fee in New York City for plumbers in 1927 was said to be $500; that of the bricklayers, only $25.[3] In 1910 the marble workers' fee varied from $100 to $150.[4] In Cleveland in 1920 initiation fees for electrical workers were $200; for elevator constructors, $100; for stationary engineers, $100; for carpenters, $50: the average was from $50 to $100. Abuses are not uncommon, and tend to create a monopoly for those who are already union members. Unfortunately, the instances which the public hears about chiefly are those of flagrant abuse.

A more indefensible method of limiting entrance to the trade is the "closed union." This method is not widely prevalent and its effect is much overrated. Most unions are "open" and while their membership may not include a large portion of those working in the trade, this is not necessarily due to restriction of admissions. Obviously, when a union refuses to increase its numbers to meet the market demand, it must either give up the closed-shop monopoly or make some other arrangement to supply the employer's needs. The device chosen is the "permit system." This method gives the nonunion man a right to work on a union job, although he is not permitted to join the union. A recent illustration is that of the electrical workers' locals in New York City. It appears that in 1925 this union, numbering at that time about 6000, refused to admit any more members. More than 18,000 electricians were needed, however, in the New York building market. Permits were issued to nonunion men when all union electricians had

work, and were withdrawn in favor of the latter when they were unemployed. The permit men were charged $2.50 a week and helpers $1 a week. The union had a closed-shop agreement, although there were between 12,000 and 17,000 unorganized electrical workers. In New York City the electrical unions had more than five thousand applications for membership in 1926.[5]

The New York City lathers employed the closed-union device for several years between 1906 and 1910. The plumbers' national organization, some years ago, passed a rule against the practice. Other unions have similar provisions. Not infrequently, the permit system was an excellent method of corruption, local officers pocketing the money received for permits. But no prominent official in the labor movement ever endorsed this practice nor have the national unions given official sanction to the closed union.[6] When the union makes no effort to organize the unorganized workers in the trade, dual unionism may result, as in the case of the painters in New York City at an early period. Another instance is that of electrical workers in the same city, not admitted to the union or refusing to pay the permit fee, who joined an independent association and secured work at repairing where the union had no control.[7]

Another method of regulating the supply of labor in the building industry is by means of apprenticeship control. We have indicated in another chapter the larger aspects of this question. Our attention here is directed to those working rules which restrict admission to training. Since control of the labor supply is indispensable for the effective functioning of the union, and since, in the building trades, apprenticeship is one of the primary sources of labor supply, the efforts of the union are founded upon a fundamental need. The most frequent restriction is an age limitation. Contrary to common opinion, unions do not attach special importance to limitations upon the age of entering apprenticeship.[8] After a study of several hundred agreements in the building trades, it was discovered that

only in the electrical construction trade is an age limitation included in every agreement. In that trade no one under 18 years of age is admitted to apprenticeship, but no upper age limit is provided. Of 49 trade agreements which impose some age restriction, 3 place the upper limit at 18 years; 1 at 19; 2 at 20; 14 at 21; 20 at 22; 2 at 25; and 1 at 30 years; while 6 impose a lower limit but no upper age limit. Thirty-three of the agreements set an age below which apprentices are not to be admitted, 11 placing it at 16 years; 16 at 17 years; and 6 at 18 years.

Do these age limitations materially restrict the labor supply in the industry? Are they indispensable to the union in exercising control over the entrance to the trade? Unquestionably they are not determined "scientifically." Nor is it possible to measure accurately the amount of restriction which they alone produce. Employers frequently say that workers willing to accept the low wage during the training period should be permitted to do so even if they have passed the upper age limit. In only a few instances have the unions stubbornly insisted on the age limit. It is primarily a result of custom; apprentices usually were from 16 to 21 years old. It continues for no special reason, unless it be that the wages are such as only boys under age would accept. The unions could well afford to relax the age restriction in individual cases, and many of them do.

But these are not the most important restrictions. A more vital question, the employers maintain, is that of the length of the training period. This has already been discussed in another chapter. Four years is too long a period to spend in teaching the craftsmanship which the trades require. Many open-shop employers demonstrate that apprentices in skilled trades can be trained in a period of three to six months. The unions often challenge the skill of these "trade school apprentices." However, the existence of an inflexible rule, at a time when technical methods are undergoing significant changes, is well-nigh indefensible. In only a few instances, and these only where

harmonious joint relations exist, is the training period reduced. The three- to four-year period still predominates. The Bridge and Structural Iron Workers' Union and the Asbestos Workers' Union, however, provide for a training period of only two years. The three- and five-year periods are also frequently employed. The plumbers' union locals often provide for a fifth year of training as a sort of intermediate year when the apprentice's wage rate is higher than in his fourth year and more independence is granted to him, but he is not yet classed as a journeyman.

The rules concerning the number of apprentices to be permitted in each shop or to each employer also vary. Generally, this is based on the number of workers in the shop or on the payroll. In some cases one apprentice is permitted to two journeymen; in others one apprentice for the first two journeymen and one for each additional five journeymen. Some unions limit the number of apprentices to be allowed to each shop, irrespective of the number of workers employed therein, while the locals of the electrical workers and sheet-metal workers base the number of apprentices to be allowed in the trade on the number of workers in the local union. Cases where apprentices are not taken into the trade for a period of years, or where only journeymen's sons are permitted to enter, are found in localities where the unions have had a free hand in controlling the job; and, when found, have encountered considerable resentment from employers.

How far do these limitations restrict the employer in conducting his business efficiently and in securing a sufficient supply of skilled labor? As indicated in a previous chapter, the unions point out that in almost all building centers employers have not taken the full number of apprentices allowed by the rules, and that so long as this is true, there is no restriction. This seems logical, and part of the problem is the employer's indifference; but the latter may be the outcome of the union's restriction.

Employers find that training apprentices is too expensive in wages, allowed to the boys as well as to the journeymen who are losing time in giving the training. Moreover, not until his last year of training may the apprentice do work over which a journeyman has jurisdiction. Some tools he may use only under the supervision of the journeyman, and some not at all. These restrictions were originally intended to prevent the employer from exploiting the boy, but at the present time they make the latter's work unprofitable. Employers have at times pointed out how these rules hinder the stabilizing of industrial relations, but nowhere has the problem revolved on these regulations. We reserve for later discussion the question of how essential they are to the purposes of unionism.

4. Working Rules and Efficiency

The open-shop advocate gets most of his anti-union ammunition from rules curbing efficiency by restricting the use of machinery, preventing or discouraging changes in methods and improvements in management, limiting either actually or tacitly the amount of work a mechanic may do in a day and interfering with the employer's "business rights." In what way does a union interfere with efficiency? To what extent? What economic factors in the industry have either encouraged restriction or, at least, militated against an improvement in the situation?

The difficulties in answering these questions must be pointed out. To talk about restriction of efficiency implies a knowledge of what efficiency has been, is, or ought to be. When the United States Bureau of Labor Statistics early in 1923 began an investigation of labor productivity and costs in certain building trades, it not only found the task more complicated than in other industries but also, "notwithstanding the persistence of articles and interviews in newspapers and trade journals about the relative inefficiency of labor as compared with former years, *this bureau was unable to find a single building contractor, super-*

intendent or foreman who had a record of work done per man hour on jobs in progress or upon any other jobs." [9] It is only recently that records of man-hour production have been installed, and these only by large and stable contracting firms.[10]

What is a "fair day's work"? Who is an average worker? Building contractors base their answers on their "experience" when "at the bench," or, as is charged by union members, on the production of "pace setters," "job pushers" and "hustlers," whom they pay a secret bonus in return for extra exertion. Unquestionably, the charge of restricted production and inefficiency loses much of its validity in the absence of production records. To complicate the question still further, technical changes and new standards make comparisons difficult if not ridiculous.[11] Inadequate cost systems make it impossible to compare jobs. There is also a difference in seasonal efficiency. In the summer, when every available worker is needed to complete the building before the leasing date, inexperienced men are employed, and efficiency is sacrificed. It increases when the summer rush is over and slow workers are weeded out. In winter, inclement weather may counterbalance the greater exertion which a worker makes in the effort to retain his job.

In all the discussion of this subject since the war, one thing is evident. The building industry is woefully ignorant of what an efficient worker is and how much he can produce. Obviously, the very nature of building operations, the small job units, the small contractor, the shifting character of the work and the influence of the weather make the task of defining and measuring efficiency exceedingly difficult. Also the rapid technical changes soon upset accepted standards. The product made by the building-trades worker does not readily lend itself to measurement.

The number of hours it would take, for example, to lay 100 square feet of flooring with a $2\frac{1}{2}$-inch board is different from that required for $2\frac{1}{4}$-inch boards; it is also different if the flooring is laid in a bungalow, office building or apartment house.

There is no unanimity of opinion as to the number of bricks that can be laid in a day. Some, thinking of summer construction, say 1500; others, referring to winter building, say 1000. It is one number for a small house, another number for an apartment house. It depends also on whether the work is done by skilled workers or "green hands"; on an 8-inch wall or a 16-inch wall; with face brick or common brick.[12]

Bricklaying today is not the same as formerly. Before the advent of steel and concrete construction, the columns supporting a building were of brick. At the present time, they are of different materials — steel or concrete — and the brick walls around them are nothing but curtains to keep out the cold. Therefore, the bricks must be more carefully laid than if these walls were a foot or more in thickness. The demand for more windows and open spaces also retards the speed of a bricklayer. Moreover, twenty years ago the mortar was made from lime. Now much of it is mixed with cement, which, according to some architects, makes the work slower. Union men contend that, owing to these technical changes in the art of building construction, comparisons of efficiency are meaningless.

5. Rules Limiting Output

It is with these facts in mind that we must consider the working rules limiting the daily production of workers. To charge limitation of output, without giving careful consideration to the job, the worker and the time, is to state only a part of the problem. The study made by the United States Department of Labor, already referred to, discovered that "Unionism appears to have had very little influence [on efficiency and output] in a given trade in a given locality as far as bricklaying is concerned." The number of bricks placed on the wall per day differed not only for various union cities subject to the same rules but for nonunion centers where there are no union rules.

On account of the intermittent and seasonal character of employment, building-trades unions as a group have great in-

centives to restrict output. They are able to maintain restrictive rules because of the willingness of employers to condone such rules, the local character of the market and their own strong bargaining power. Although restrictions vary from place to place and for different unions, a few trades, particularly, have been notorious in this matter.

The lathers' union has been able to impose restrictive rules in several cities. The standardized product with which this union deals makes it possible to define exactly what the union considers a "fair day's work," and to discipline members who exceed that limitation. In Chicago for many years, notwithstanding the "no-restriction clause" in the agreements of that city since 1901, a member might nail up during an eight-hour working day "thirty bundles of lath or about 100 square yards under the 'key' [distance between two laths]." In New York the daily quota is defined as sixteen bundles of lath.

The bricklayer comes in for his share of criticism. But here one fails to find specific mention of restriction in union rules or constitutions and must charge secret understanding. The national constitution and many of the local agreements specifically prohibit restriction. It is known, however, that in many localities bricklayers will not let the line be raised to the next course of bricks until every man is through with the lower course, although this rule cannot be found in written form in any of the bricklayers' agreements, rules or constitutions.[13]

The psychology of the industry encourages restriction of output. The urge to "keep in line" is there, and men in the trade know that, from their point of view, it is best to avoid rushing, that "laying bricks with both hands, spreading mortar on the wall before the line is put on, repeatedly slacking the line before it is laid out on its entire length, putting up the line more than one course at a time, the laying of bricks above the line" and similar practices will injure the interests of a fellow worker.[14] These rules were of greater frequency two decades ago before the anti-restriction attitude of the national

officers had much influence. Here is an interesting resolution which appeared in the *Bricklayers' Journal* of March, 1904:

"Whereas the working rules and customs now in vogue in many localities are not conducive to our respective trades, Therefore, be it Resolved, That each subordinate union in affiliation herewith shall hereafter in the month of January of each year appoint a special committee of three members to frame and submit for adoption a code of working rules governing the practice of bricklaying with a view of elevating and abolishing the discreditable and destructive custom of laying bricks with both hands, elevating the line more than one course at a time and other kindred violations."

Certain painters' locals do not permit their members to use a brush wider than $4\frac{1}{2}$ inches for oil paint, although for certain classes of work a wider brush is more economical. There are few other unions against whom actual restriction of output is charged.

The investigation of productivity by the United States Department of Labor, while not intended to measure restriction, does indicate that at the present time there is no basis for the charge of general restriction. Of the four cities where union and nonunion figures were obtainable, only one city, Chattanooga, shows a higher productivity for nonunion bricklayers. In plastering, out of seven cities compared, four have a slightly higher productivity for nonunion workers.[15]

Perhaps the primary justification of rules restricting output is to prevent "speeding" and "rushing." [16] The early rules of the District Council of Carpenters of New York City fined a member who did "an unreasonable amount of work" or acted "as a leader for his employer for the purpose of getting all the work possible out of the men working." [17] The tile layers for many years provided that "each and every member" would "be expected to do a fair day's work," and discharged anyone if he was "working detrimental to the interests of other members." [18] The facility with which one can become a contractor makes most subcontractors mere foremen with incentives to

exploit labor. "Lumping" the work out in "pieces" is met with rules against piecework or doing an "unreasonable" amount of work. The rule of the New York lathers against piecework is stressed as a means of enforcing the eight-hour day. The bricklayers, on the other hand, prohibit "lumping" because the small employer has too much incentive to foster speed-up methods.

The painters concentrated against the "rusher" who was hired to set the pace; the other workers had either to keep up with him or lose their jobs. The unions contended that rushing resulted in inferior workmanship, inferior to that agreed upon in the contract. To prevent this, the painters' union in Philadelphia requested that the architects submit a copy of the specifications to the union, which, in turn, would see that there was no skimping in the work.[19] The painters in New York proposed the establishment of a City Bureau of Painting with supervisory functions, which should curb the activities of contractors relying on pace setters for their profit. Another remedy suggested was that the union should determine a scale of work not to be exceeded. Neither suggestion was adopted.[20]

Restriction would still be tacitly enforced even if there were adopted the recommendation of the "Lockwood Committee," investigating building conditions in New York City in 1921, that the union's objection to rushing and pace setting be abolished.[21] In trades where speed can be compared men do about the same amount of work, whether unionized or not.

There are other motives for these restrictive rules. Rushing and pace setting are both reprehensible if they compel exertion above a "fair day's work" — exertion which might endanger the health of the workers. The lathers in Chicago offer an ingenuous argument to justify their low production standard. It is to "carry" the members who are beyond the prime of life. "In order to prevent a displacement of elderly workers it has been felt necessary that younger union members be prevented from placing a premium upon their own services and against

those of the older men." It is unjust, they hold, to require that all should work at the rate of the most able-bodied. Since the industry makes no provision for taking care of the older workers, the union must protect them.[22]

The "lump of work" argument is also responsible for restriction. Too much emphasis cannot be placed on the relation between seasonal unemployment and restriction of output in the various trades. Among building mechanics at the beginning of the fall months, one may discover an increased efficiency prompted by a desire to be the last one to be discharged. But what is more obvious is the slackening in efficiency during the entire summer, in order to make the work last longer.

6. Restricting Machinery and Labor-saving Devices

Of increasing importance are the rules and regulations which restrict the use of labor-saving devices and machinery. For many years the only opposition to machinery came from the stonecutters. But technical changes are rapidly affecting other trades. Building-trade unions follow the traditional attitude of labor organizations and often contest the introduction of machinery. The belief that benefits from such improvements do not accrue to the workers but to employers and the public — a fear usually correct from the short-time point of view which a worker necessarily has — is responsible for this attitude.

Stonecutters opposed the stoneplaner and stonepick in the last quarter of the last century; the cement masons opposed the cement mixer; and the painters object to the paint spray — these are instances of opposition to machinery. Such instances do not often occur in the building industry, however. Most of the restrictive rules are on questions of method of production. The plumbers in some localities do not permit their members to use bicycles in going from one job to another; they also prohibit anti-siphon traps; the plasterers object to cement casts above a certain size being manufactured in the shop; some

locals of plasterers compel the destruction of models after a single use; some locals of cement workers oppose the use of "accelerators" in concrete; the plumbers' and steam fitters' rules prohibit the cutting of pipe below a certain size by machinery and insist on cutting it by hand on the job; the bricklayers used to oppose concrete; the marble workers contested the use of pneumatic hammers — these are some illustrations of rules against labor-saving devices which exist, though many of them are no longer enforced.

Details of some of the more important struggles against machinery have been given elsewhere. Wherever the union failed to keep out the machine, it sought to control and regulate its use. The old attitude, that improvements which tend to reduce the demand for human labor are the greatest danger to the workers' standard of living and to the union's bargaining power, overlooked the long-time aspect of such improvements. A policy based upon immediate expediency was likely to be obstructive.

7. Limiting the Initiative of Management

Opposition to machinery now is either a matter of history or is relatively unimportant as a method of restricting efficiency. Of greater consequence are those rules which concern themselves with restrictions on the powers of management. A union does not limit its function to raising wages, shortening hours and improving working conditions, but assumes the prerogative of protecting these against any contingency. In doing so it becomes necessary to exert a controlling influence on matters which, to the outsider, appear purely the function of management. Unions do not deny that some of their rules may decrease efficiency and increase cost. This admission, however, should not leave the impression that these restrictions do not have the recognized function of protecting something which is conceded to be within the union's sphere of interest.

Essentially, the effect of the practices classified in this group is to prescribe to the employer under what conditions his work should be done and who should do it. Such rules prohibit the employer from working at his trade; compel him to employ a foreman on every job, or one foreman for a certain number of journeymen; force him to employ skilled men on work which can be done with equal expedition and efficiency by unskilled labor; specify the number of men that must be employed on each job; prohibit the employer from dividing his work in the manner he sees fit and from hiring it out to subcontractors; prohibit him from doing work by machinery in the shop and force him to do it by hand on the job; impose restrictions on him as to how he shall pay for his work; prohibit piecework, lumping, or a bonus system; forbid him to install timing devices; and in some instances provide that he hire his men from the union office.

8. Prohibiting Employer from Working on the Job

Almost all unions in the building trades prohibit an employer from using tools on the job. This practice, clearly separating the function of the employer from that of the worker, is rather effectively enforced. In Chicago, at the present time, agreements in trades which include more than one-half the mechanics specifically prohibit the employer from working on any job or from working on a job where there are less than a certain number of journeymen.[23] The justification for this rule lies in the fact that an employer working on the job is a potential pace setter. Also he is displacing a worker. This prohibition is one method of limiting the labor supply.

9. Restricting Worker from Becoming Employer

A counterpart of the above rule is one which restricts a worker from becoming an employer. Such restrictions are being modified; in some cases the union man is encouraged to

experiment with his managing ability by becoming an employer. The painters' union in Chicago, for example, does not permit a member to become a contractor until he has been in the union at least five years. Even after having met this qualification, he must secure a permit from the Painters' District Council and pass an examination of the Board of Business Agents, to prove that he is qualified to be a contractor.[24] Since the closed shop is enforced in the painters' trade in that city, this restriction practically gives the union an absolute veto on a worker's opportunity to become a contractor. The only recourse open is for the would-be employer to operate in a locality not controlled by the union.

The stonecutters permit a member to become an employer by issuing an "employer's card" to him, but he himself must abstain from cutting or carving unless he employs two or more journeymen. If he cancels his card, one year must elapse before it is reissued to him. The asbestos workers permit their members to become employers. They must surrender their union cards, and have no right to work further at the trade. Most bricklayers' unions forbid their members, upon penalty of discharge from the union, to do subcontracting work in excess of $50.[25] The New York carpenters make little effort to prevent their members from experimenting in this field. The union regularly has on deposit a large number of cards of members who are also "employers" and who, by maintaining their membership, are permitted to work at the trade. This is a valuable privilege.

A union's opposition to its members becoming employers arises out of the difficulties it encounters in dealing with small masters. Constant and costly vigilance is necessary to enforce the union standards upon small contractors, particularly in the building trades where the line between subcontractors and men working for wages is often finely drawn. The small establishment, on account of its limited financial resources and the absence of efficient methods, resorts to competitive practices

and speeding-up devices which endanger the union standard of working conditions.

10. Opposition to Lumping and Subcontracting

Opposition to minute division of labor has been based upon similar reasons. The conflict over subletting ornamental work to one contractor and ordinary plastering to another, and that over the division between fireproofing and general mason work have been discussed elsewhere. Such divisions would create additional specialists and aggravate unemployment. The Chicago carpenters prohibit subletting of any carpentry work except stairs. Other unions also have provisions regulating the division of labor. In order to decrease the number of small contractors operating in the industry, some unions require that the builder must "purchase the materials from the same contractor who supplied the labor." To furnish materials, the builder must have either capital or sound credit with the dealer. To keep the fly-by-night specialist contractor or "labor broker" out of the industry is the purpose of this provision. It has frequently been abused so as to give the contractor an extra profit and prevent the builder from buying materials direct.

It is for this reason that the union's restriction on its members doing contract work is important. The opportunities for a union man to get small contracts are great; the tools needed are no others than those which he uses as a worker, and the supervisory ability required is not of a very high degree. If he were not restricted in doing contract work, there would be no way of enforcing the standard rate, which is such a vital part of the collective agreement. In practice, contract work by union members is piecework on an individual basis, introducing all the dangers which individual bargaining entails for the union. Rules prohibiting lumping may, on the surface, appear to be a serious restriction of the right of the employer to divide his work as he sees fit. In practice, however, they have im-

posed but little restriction on the industry. At most, the rules prevent union men from doing piecework.

11. Control over Foremen

Another group of rules enforced throughout this industry applies to foremen. Those agreements which contain provisions about foremen state that they shall be the agents of the employer, but they must also be members of the union. Frequently they specify that the foremen's wages shall be in excess of the journeymen's, usually one dollar a day more. The rules may also provide that there must be a foreman on every job. If there is only one worker, he must be considered a foreman and paid a foreman's rate. If there are more than a certain number of workers, there must be two or more foremen. And finally, some unions limit the foreman's activities to supervision and do not permit him to use tools.[26]

The employer objects to such rules chiefly because the union reserves the right to discipline the foreman for his conduct on the job. A foreman convicted of "rushing" is subject to stricter discipline than a worker guilty of the same offense. His activities on the job are often subject to review by the union; workers may file complaints against him. Conviction results in suspension from foreman's duties for a period of time, a fine and frequently even suspension from the union. These limitations on the foreman's power restrict his supervisory initiative and deprive the employer of much of the value of his services. Recently, by giving the right of reviewing a foreman's activities to a joint trade board, this objection has been partly met.[27]

12. "The Full Crew" — Specifying the Number of Workers to be Used

Some unions specify the number of men to be employed on a particular operation. In the iron-erecting trade, for example, the union regulates the number of men in a riveting or rigging

gang, and provides for an extra man for "spells off." [28] The engineers in Boston for some time enforced the one-man-one-machine rule, and required that if an extra cement mixer was installed an extra engineer be hired.[29] In many cases the rules merely codified customary practice, in the first place. However, as methods of expediting work were developed, these rules became costly impositions. In plumbing, in work on ornamental iron and in other trades, there are provisions for the employment of helpers on all jobs. The steam fitters provide that every journeyman be accompanied by a helper, even if the helper is not needed. The plumber's helper rule has a special refinement. In some unions in New York City a helper is permitted only if there are two journeymen. If one journeyman needs help, another journeyman must accompany him.[30]

The "maintenance men" of the hoisting engineer, elevator constructor and electrical worker are only other instances of such rules. While the maintenance man is supposed to "oil the machinery and see that the wheels turn around," he gets extra compensation if elevators are operated during construction. In New York City he is allowed two extra hours' pay a day if one elevator is operated, four hours' if two elevators, and if three elevators, he gets a full day's pay and all overtime. In Boston an electrically driven pump requiring occasional oiling had to have a full-time engineer.[31]

13. Shop Work versus Job Work

When machinery was introduced in the building industry during the nineties of the last century, the amount of work delivered to the job ready for installation increased. The carpenters were the first affected by this innovation, but instead of agitating against machine-made products, they secured control over shop work. The sheet-metal workers had a similar experience. But there were a number of unions which had no means of getting control of shop work and these legislated against the innovation. To the present time the plumbers'

union, wherever it is able to secure effective control, refuses to put up iron pipe of one to two inches in diameter which has been cut, threaded and measured in the shop, insisting that this work be done by hand on the job.[32]

The restrictions of the painters and glaziers in the Chicago market are similar. The District Council of painters provides that such work as priming, painting and glazing of sash and frames shall be done on the job. Members are prohibited from cutting stencils or drawing sketches for an employer in their homes. The plasterers' rule against installing prepared plaster has in most instances been abolished. However, in some localities the rule to dismantle plaster molds which have once been used is still enforced. Many unions, however, are aware that most building operations will eventually be mechanized, and they recognize that opposition to the spread of shop work is futile.

14. Skilled Workers for Unskilled Work

Another set of rules restricting managerial freedom requires in substance that skilled workers perform tasks which can be done as well by common laborers. A study made by a group of engineers in 1920 [33] cites six rules which fall in this class:

"(a) Carpenters' helpers are prohibited from using carpenter tools, requiring carpenters to do such work as stripping forms from concrete. Experience shows that helpers can do this work more economically and as well.

"(b) Brick masons insist on washing down and pointing brick work when laborers could do it more economically.

"(c) Structural steel workers under certain rules must bring the steel from the unloading point to the building site, thus doing laborers' work at a high cost.

"(d) Structural steel men place reinforcing steel for concrete, whereas experience has proved conclusively that properly trained laborers can do it to as good advantage, and at greatly lowered cost.

"(e) Structural steel men claim the rigging on a job. For a small derrick used in footing excavation, the bucket cable had to be guided by hand and the hoisting engineer signalled by a skilled iron worker.

"(f) Hoisting engineers claim the right to run all types of engines, including small gas driven pumps which require no skill. On one job a contractor had to hire a union engineer at $8.00 a day simply to start a pump in the morning, oil it occasionally, and stop it at night."

It should not be inferred that all local organizations of the unions cited in these illustrations enforce such rules. In New York City, for example, where the ironworkers' union has had no agreement with the organized iron erectors since 1906, no union rules of any importance exist. The unions defend such rules, where defense is demanded, by claiming that these are essential to jurisdictional control of the work. Emphasis on such rules does not merit the conclusion that they are responsible for a great increase in costs. They are enforced by only four unions in a few cities, and are cited merely as typical of rules placed in this class.

15. Quality Regulations

Severe criticism of union interference with purely managerial functions arises on the score of efforts by the union to act as "quality inspector." We have already pointed out the relation between the union rules against rushing and quality standards. Painters, plasterers and plumbers particularly are assailed on this score. An instance is on record where a painting job had to be done over at much expense because the business agent of the union did not like the color scheme.[34] A more conservative stipulation is:

All work must be done in a thorough, workmanlike manner, and all journeymen under the instruction of the foreman must complete their work in such a manner, or make it right in their own time. Should any foreman refuse to divulge the name . . . of any journeyman who has left his work in an unworkmanlike manner . . . he (the foreman) shall be fined the sum of not less than $10. nor more than $50. or barred from acting in the capacity of foreman from one to five years, or both.[35]

As pointed out elsewhere, the painters have demanded that job specifications be submitted to them and that they be permitted to compel the contractor to apply the number of coats called for in the specifications. In New York the painters agitated for more thorough quality inspection through the establishment of a municipal painting bureau. The plumbers in New York insist on inspection of all plumbing work. The theory they advance is that hasty production lowers the quality of the job and endangers the good name and skill of the craftsman.[36] In some instances the contractor has conceded this. On the whole, however, employers insist that such inspection is another method of "making" work, and that making work is the purpose of the plumbers' delegate, when, for example, he orders the plumbing removed and new plumbing installed "in accordance with the city regulations." An inspector seldom orders changes, but waiting for him to come around results in extra pay.[37] The general feeling is that the responsibility for quality rests with the contractor and "is none of the union's business." While the consumer has a vital interest in this matter, the employer refuses to concede the union's right to represent the consumer.

16. Limiting the Employer's Right to "Hire and Fire"

Rules in this group are of minor importance in the building trades, and presumably the few instances of restriction on record are magnified far beyond their real significance. Keeping in mind closed-shop conditions, the employer has an unlimited right to "hire and fire." As a matter of fact, it is this unlimited right which has brought in many other rules as protective devices. If building-trades employers were willing to restrict their right to discharge and would guarantee tenure of job somewhat, it seems probable that many of the restrictive practices would be eliminated.

The very fact that the typical builder is a small business man, and that the industry is characterized by seasonal construction and dependence upon weather conditions, necessitates an unlimited right to lay off and discharge. The unions make little effort to restrict this right. Discharge on account of union activities is of course prohibited. Obviously, the closed shop is in itself an important restriction. The employer must hire union men only, and if the union is unable to supply all the workers necessary and the employer hires nonunion men in the market, these must be discharged first in case of necessity. The general rule among building-trades unions is that an employer may discharge a worker at any time. "The foreman . . . may discharge a man if he does not like the color of his hair." Provided the employer hires another union man to fill the vacancy, the union will not protest against a discharge even if it is for not doing a "fair day's work."[38] In short, the principle of the closed shop and the principle of preference are the only practical limitations to the employer's right to hire and fire. A man's efficiency is tested soon after he is hired; if he is not satisfactory, a few hours' notice or a few hours' pay will get rid of him. There is, accordingly, no guarantee of continuous employment.

Far more important are the rules compelling an employer to pay "for readiness to work."[39] The object of these is to prevent abuse of the unlimited right to lay off, and to compel the contractor to bear the responsibility for poor management when it results in shortage of materials or poor delivery. Thus, a rule provides that when a man is told to report for work, and work is not found for him, he must be paid for a specified number of hours. Under conditions of operation in the building industry it is essentially a regulatory practice, which usually penalizes only the inefficient employer and protects the worker.

Some regulations provide that men must be hired only from the union headquarters, from a "waiting list," and those sent must be put to work for a minimum number of hours.[40] The

"waiting list" was originally adopted in order to prevent the business agent from favoring one union worker over another; it sought to eliminate an abuse of union politics. But the employer objects because a union can send workers who, on account of age or for other reasons, are inefficient, and the employer has no recourse. If he discharges them and calls for others, he cannot be sure that he will not receive the same type.

17. Restrictions on Materials

Building-trade unions have probably been most successful in enforcing rules prohibiting their members from working on materials manufactured under nonunion conditions. The carpenters were most active in prohibiting their members from erecting nonunion-made wood trim. The sheet-metal workers have similar provisions, but have been less successful in enforcing them. The ironworkers made repeated attempts to organize the fabricating shops. The President of the Bethlehem Steel Company stated that one of the reasons for opposing a closed-shop erecting industry is his fear that the unionized erectors may become strong enough to reject all nonunion-made steel.[41]

The electrical workers were only partly successful in refusing to install nonunion electrical products, but manufacturers on many occasions expressed deep concern over the extension of the policy. The plumbers made no extensive effort to enforce their program in this direction, but building-trades history is replete with illustrations of refusals to install nonunion plumbing supplies. The stonemasons are only indirectly concerned with this policy, but efforts were made to prohibit masons from erecting stone delivered to the job ready for use. The intent is to compel the employer to finish the stone in the city with union labor rather than in the quarry under nonunion conditions. The stonecutters' extensive campaign against erecting stone cut in nonunion quarries is of recent date. These

are the leading instances of unions seeking to extend their control beyond the erecting processes into the material industries.

Other unions made few efforts to control the shops, but most agreements specify that prison-made goods shall be excluded. The abuses of the nonunion-material rule arise where the union not only dictates that such material must be union made, but also indicates the source and the locality from which it is to be purchased.[42] The implications of such a policy are apparent. Once the unions succeed in enforcing it on a large scale, the way is open for an extension of unionization into many industries. The carpenters, if successful in compelling contractors to buy only union-made materials, could soon organize the largest mills in the country, and it is not inconceivable that they could make pressure felt through the entire woodworking industry, even to the lumber camps. The same might be true for other unions.

The motive is not without justification. The position of the carpenters is a case in point. The advent of woodworking machinery threatened the bargaining power of the carpenters' union by greatly reducing the amount of work for the outside carpenter and injecting competition from unskilled and semiskilled machine woodworkers, who left their inside jobs during slack periods. In short, if the union was to defend the conditions already won, it seemed necessary for it to extend its control to the material shops.

The history of the struggle to exclude nonunion-made wood trim, sheet metal, fabricated iron, electrical fixtures, stone and marble will be given in detail elsewhere. These boycotts were successful in varying degrees, depending upon the strength of the union and the support it received from organized labor and employers. Nonunion manufacturers sought relief in courts. The situation was brought to a climax by a decision of the United States Supreme Court in April, 1927, in the case against the Journeymen Stonecutters' Association. The court ruled that such a boycott unreasonably curtailed interstate com-

merce, and issued an injunction forbidding the union from continuing the practice.[43]

18. "Scientific Management"

Little effort is made in the building industry to introduce methods and practices commonly known as "scientific management." The nature of building operations does not permit the ready introduction of methods used in housed industries. Nevertheless, many union rules stand in the way of an improvement in this direction. Bonus systems, wage-payment plans, time and motion studies, time tickets and similar devices are specifically prohibited in many localities.[44]

19. Wage Regulations

One might expect that since wages and hours are the two most important subjects of trade-union regulations, many rules concerning these would be found. The existing rules were established many years ago and seek to define the union policy in general terms. The protection of the standard rate is indispensable to collective bargaining, and deviation from the minimum rate is a serious offense. However, even well-organized vigilance cannot prevent connivance between union members and small employers for the payment of wages below the minimum rate specified. Frequently, to avoid detection, workers secretly return some of the wages received. Such instances arise mostly during times of severe unemployment.

Provision is made for payment below the minimum under exceptional conditions. The competency of a worker, on the basis of which, usually, he is admitted into the union, is judged by his ability to earn the minimum wage. That is, the candidate must be proficient enough to produce the quality and quantity of work necessary to earn that wage. However, many men, owing to their age, to ill health, accident or other causes, are unable to earn this rate. These are frequently admitted as "improvers" and permitted to accept a rate somewhat below the minimum.[45]

In the building trades the minimum rate is generally based on the assumption that only about forty weeks of work are available during the year. But for building-trades workers employed in factories where more continuous employment is possible, the union permits a lower rate. Such instances are not common. Most unions prohibit any deviation from the standard minimum wage. The painters, for example, oppose a graded scale of wages as "demoralizing," as an incentive to reckless competition. They suggest that if employers wish to establish a graded scale they may do so above the minimum. Also, the carpenters, stonecutters and painters are opposed to men being classified on the basis of competency.[46]

Although unions object to the wage rate falling below the minimum, they make no serious efforts to keep it at that level. The building-trades unions contend that the rate established in the agreement is only a minimum rate, and that employers are free to pay above that. But the relatively high hourly rates of the last few years militate against the payment of any higher wage, and efforts on the part of the workers to exact more, or of employers to pay more, have been resented by the public. The volume of building between 1923 and 1926 produced such an unprecedented demand for labor in the skilled trades that, in order to attract union labor, employers engaged in residential work in the larger cities and their suburbs offered wages far in excess of the rates stipulated in the agreement. To compete with such rates, organized contractors had to offer lucrative bonuses. This snowballing of wages frequently increased wage rates from two to five dollars a day above the scale agreed upon.

Employers' associations oppose the practice, usually begun by "independent" builders. However, as it operates at a time when the demand for labor is in excess of the supply, there is little chance of combatting it. The most noteworthy instance is the "anti-snowballing clause" in the agreement between the Allied Metal Building Industries' Association and the House-

smiths' Union in New York City. "The parties hereto undertake and mutually agree that the practice of snowballing is demoralizing to the Association and to the union in that it encourages unnecessary and undesirable shifting from employer to employer and produces distrust among both employer and employe, each of the other and of their organizations." [47] The employers have opposed snowballing not so much on the ground that it produces distrust as that it increases the labor cost and brings about a movement for wage increases with the aim of making the "voluntary bonus" a part of the "compulsory wage scale." The union opposes it because the bonus attracts new workers to the locality, who overburden the labor supply when the peak construction period is over.

Fear of undermining the standard rate is the principal reason for opposing piecework, which is not possible on a large scale in the building trades. Some trades, however, are so organized that under proper precautions piecework is permitted. It has been used by the lathers in several cities. The paper hanger is allowed to do piecework, but the rules specifically provide that in doing so he shall not be considered a contractor. The painters' union permits its members to do contract work, if the contract is taken directly from the owner or the general contractor. The painter may even hire another worker to assist him. But if the contract is secured from a painting contractor, then the work is declared to be piecework and is prohibited. Other unions prohibit any kind of arrangement which borders on piecework, on the theory that it is more difficult to regulate. Many of the practices discussed under the rules restricting output grew directly out of the union's opposition to piecework. Underbidding can still be continued by men offering more work for the same hourly wage. It is this possibility which is responsible for many of the anti-rushing and anti-pacesetting rules.

Overtime regulation is of considerable importance in building-trades unions. Most of the organizations provide for overtime rates between one and one-half and two times the regular

rate. These are attacked as excessive. The purpose of these rates is also criticised. The unions contend that the rate is intended to be punitive, to discourage overtime, to force an employer to do all the work during the regular eight hours. Opponents, however, cite that union men request overtime and in many instances go out of their way to get overtime as against regular work. Moreover, in many trades overtime cannot be avoided without causing damage. A machine breaks while concrete walls are being placed, or preparatory work is necessary after hours to get a good start for the next morning.

Undoubtedly, the abuses of overtime are numerous enough to give the impression that this is another special device for getting more money for less work.[48] An examination of union policy, however, shows a fundamental purpose behind overtime wage regulations. The union is interested in equalizing the working opportunities of its members. This is attested by rules against working overtime without special permission.[49] Several organizations absolutely prohibit work on Saturday afternoon at whatever wage, but allow it on Sunday at overtime rates. At one time the experiment was made of giving overtime work to unemployed members only. Some unions do not permit a member to do overtime for any other employer than the one for whom he works during regular hours.[50] The granite cutters in many jurisdictions enforce the six-hour day rigidly during the slack season.[51] Other organizations prohibit all overtime unless an emergency exists. Employers' associations discourage the practice and in numerous instances discipline their members who violate the rule.

Essentially, these regulations seek to protect the standard week against the first entering wedge — permitting systematic overtime, even at higher rates than ordinary work. Punitive overtime rates aim to spread production over a longer period and to equalize the working opportunities among the union members. Higher overtime rates would tend to extend the building season somewhat. But in spite of punitive rates, em-

ployers continue to use overtime, because they must finish buildings at the specified dates.

The five-day week has behind it the same motives. The health argument of the painters may have some weight, but in large part what the men desire is to spread out the work over the year. To the employers the five-day week (with five and one-half days' pay) is simply another illustration of restriction of output, particularly if the unions, enjoying the five-day week, permit their members to work on Saturday at double pay. There may be a strong incentive to work slowly during the five days to get overtime on Saturday.

Other regulations concerning wages deal with specific problems — the form in which wages are to be paid, the date of payment, questions as to extra pay for "waiting" for wages, payment for "readiness to work," payment at time of discharge, payment of carfare when the distances traveled are above a certain number of miles or the cost is above a certain sum, and the localities where the "local" wage rate is to apply.

According to a rule enforced in a number of organizations, particularly by the painters, a local builder who secures a contract in another city must pay the workers the rates prevailing in his home city, and follow its rules or those of the city in which he has the contract, *whichever pays the higher wages and allows the shorter hours*. Not less than 50 per cent of the workers must be hired in the locality where the work is to be done.[52] Contractors took this rule to court as discriminatory and unreasonable.[53] Courts refused to interfere on the ground of legal principles, namely, that the rules were not arbitrary and illegal and that their enforcement was not a conspiracy in restraint of trade or a violation of the anti-trust laws. On the contrary, in view of Section 6 of the Clayton Act, legalizing the rightful objects of trade unions, several jurisdictions sanctioned this practice. The unions presented some consistent arguments in the courts defending this regulation. These are well

summed up by the United States Circuit Court of Appeals in refusing to grant an injunction. It says:

> Under the rules in question the outside employer is free to take 50 percent. of the laborers he may need from his home locality and to put them at work in the distant locality. Then he is required to pay the home rate if higher. No one has complained of this. When he has taken some of his employes with him, he must employ the remainder at the place of work. There the wage rate may be lower and the time of labor longer. If he pays a higher rate to the home laborers and a lower rate to the local laborers, trouble will inevitably follow. May not the union legislate against this occurrence? But, as here, the outside employer may, if he choose, take with him no home laborers and employ all of his men at the distant point where the work is to be done and where wages are lower and hours longer than in his home locality. May not the union, national in scope, make laws for the protection of its members everywhere, that is, may it not prescribe that when an employer leaves his locality of higher wages and shorter hours and thereby conceivably leaves at home laborers unemployed he must pay the home wage rate in the distant locality? In other words, may not the union legislate for the continued employment of laborers in varied localities at varied wage rates by providing rules that will measurably insure employment everywhere? Moreover, in large communities there is a more or less fixed labor supply. That labor supply, considered in respect to the local demand for labor and in respect to the local cost of living, determines the local wage rate and hours of labor. Obviously, these factors vary in different communities. When thrown out of their relation with one another, that is, when thrown out of balance by influx of laborers and increase of work at one place, or a decrease of laborers and a decrease of work in another place, or transposing these factors by an increase in one and corresponding decrease in the other, might not confusion arise to [the] prejudice of workmen against which the union may provide by rules?

The keynote of the dissenting opinion is restriction of competition. It states: "The rules shut out a citizen of the United States from fair competition in Philadelphia business simply because he is a resident of New York State, and give to his competitor a monopoly of that business because he is a resident of Pennsylvania." [54]

20. Exclusive Agreements

The exclusive agreement came into the building industry long before 1900 and its existence has recently been revealed in Chicago, Boston and New York City. Under the exclusive agreement, the union contracts to work only for members of the employers' association and the latter agrees to hire only members of the union. This would tend to force outsiders of both elements into the organizations with a practical monopoly of the trade; the employers could raise wages and at the same time increase profits by exacting higher prices from the public. But when the contractors' association membership is unable to employ the entire union membership, the union has to violate the agreement by permitting its members to work for non-association contractors.[55] As a result, the exclusive agreement does not always work to the advantage of the unions. In most instances the unions became recruiting agencies for contractors' associations.

The significance of these exclusive agreements with reference to restriction of output is clear. Employers' associations can maintain high prices on contracts, thereby reducing the output, and at the same time docilely accept whatever restrictions the unions may impose, in return for protection from outside competition. This condition, together with the general development of union policy as a result of public attitude and government prosecution, militated against the exclusive agreement. Many national labor unions in the building industry prohibit exclusive agreements, by constitutional provision, and discipline locals which become parties to them.[56]

The exclusive agreement was declared illegal, as a conspiracy in restraint of trade, as defined in the Duplex Case.[57] Similarly, the government held that the numerous agreements made between local bricklayers' unions and mason contractors in which the unions promised to work only for "legitimate and bona fide contractors" were illegal. Since the defining of "legitimate

and bona fide contractors" was left to the local Joint Arbitration Boards, this provision, the government contended, was both restrictive and exclusive. Sufficient evidence was presented by contractors themselves to prove that such agreements forced them to join employers' associations. The government raised the same objection to the preferential clause in which the bricklayers promised to give preference to employers who were parties to the agreement.[58] The union's defense was based on the contention that the unorganized contractor endangered union conditions.

Several important trades also prohibited their members from working on jobs where some previous owner had defaulted payment to a material man or contractor. In other words, the union became the employer's collection agent and forced the payment of debts, on threat of withholding labor.[59] This practice was only recently abolished — also as a result of government intervention and increasing control over local agreements by the national organizations.

21. Rules Limiting Contract Privileges of Employers

Closely related to this practice was another which provided that, if a particular contractor was discharged from completing a contract, the union would refuse to furnish labor for the completion of that contract.[60] This compelled the owner and architect to retain the original contractor, even if he failed to meet their standards as to quality or other matters. Only a few unions in the larger cities sponsored this practice. Recently, it has been excluded from union constitutions and by-laws, although it is alleged still to be operative.

22. Jurisdictional Rules

Jurisdictional rules are treated more fully elsewhere. It is sufficient to point out here that there is a close relationship between jurisdictional rules and restrictions upon the employer's

initiative. These rules frequently compel the employer to use workers who earn relatively high wages for jobs requiring semiskilled or even unskilled men; compel him to use several trades at an operation which could be done as well by one skilled worker with a helper. In some instances city ordinances require the contractor to employ a full-time hoisting engineer even when the job needs his attention for only a few moments each hour. Jurisdictional rules prohibit him from doing any other work between his hoisting tasks. An extreme instance of such rules is the case where, in order to move a pump to a different location in a foundation hole, it was necessary to get a pair of steam fitters to disconnect the steam pipes, a pair of plumbers to remove the suction apparatus and replace it, a structural-ironworker to erect a rig to lift the pump, and an engineer to operate the valves on the pump — eight men for the operation. One man assisted by a laborer could have accomplished the job.

23. Miscellaneous Regulations

Mention should be made of the hundreds of minor regulations seeking to protect the health, safety and property of the union member while at work. Most unions in the building trades make some provisions as to the furnishing and protection of tools. As handicraft methods are still important in most trades, the worker must often supply himself with fairly expensive tools, keep them in working order and move them from job to job. Rules specify which tools he must own and which the employer must supply. The upkeep of these tools such as sharpening must be done on the employer's time. The employer is required to provide storage and insurance on the tools for the time they are used on his job.

The high accident rate in the building trades makes safety regulation common. Ironworkers and bricklayers, for example, require protection on upper floors. Other unions make provisions for stairways and elevator service in buildings over a cer-

tain height. Sanitary provisions are not unimportant, although the progress of modern engineering makes these regulations of less consequence.

24. Relation of Rules to Union Purpose

The purpose of this review of union rules is to make apparent their relation to union functions. This relationship is often overlooked by the casual observer who merely sees their restrictive character and the impositions they place upon the employer's freedom of action. It is true that many well-intentioned rules overstep the bounds of desirable regulation and obstruct the progress of the industry. It is conceded to be justifiable, for example, to regulate apprenticeship by rules intended to prevent the overstocking of a trade with young boys. How far the unions may go and remain within the limits of justifiable regulation is subject to much controversy. What are proper limits upon apprenticeship training? Certainly, in the past, regulation by the unions either alone or in conjunction with the employer took little cognizance of the long-time needs of the industry. As a result, actual restriction upon the labor supply was considered necessary as a protective measure.

The same criteria may be applied to other union practices. While the closed shop, even when accompanied by an open union, reasonable initiation fees and low dues, may be open to criticism, it could well be classed as an effort to regulate the supply of labor. But when the closed shop is combined with a closed union, prohibitive initiation fees and exorbitant dues, it is unduly restrictive. It is conceivable that many of the rules against rushing and pace setting have their origin in the legitimate object of protecting the health and earnings of workers. But when these result in opposition to labor-saving devices or in systematic limitation of output by arbitrarily defining a day's work, they, also, cease to be regulatory and become restrictive.

Union rules must be judged by some definite standard. To distinguish between rules which are regulatory and those which are restrictive implies the setting up of some standard of judgment — in short, an evaluation of the purposes of these rules. If one accepts unit costs to consumers as the dominant consideration, obviously his reaction to the union working rules will be different than if he considers the protection of the workers' jobs and standards as the most important purpose. Whichever standard one adopts, when one considers the economics of the building industry and its business and technical structure, working rules are seen to be methods for justifiable protection of the worker's mode of life and the bargaining power of his organization. A vast majority of them are devices carrying into practice the things which the union is organized to defend.

Open-shop contractors base their opposition to unions and their refusal to recognize them on the ground that the inevitable working rules will increase cost, introduce uneconomic practices, restrict the initiative of the managing forces and give executive power to those who do not bear the responsibility. With the evidence at hand, one may venture the assertion that much more can be done to reduce building costs by improvement in the technique of management than by elimination of union rules. The indirect result of these rules has been to stimulate efficiency in the contracting organization, which must meet competition and competitive costs in spite of these rules. The responsible and competent builder frequently looks with favor upon union rules because they restrict the speed of workers employed by speculative builders who try to "get more out of labor" and so undercut prices. A statement made by an employer to the effect that the efficient and fair contractor need not fear union rules may be too optimistic, but not without basis.

Why were not these restrictions eliminated through the regular process of collective bargaining? Such union policies

in other industries could not withstand much opposition. In the building trades, restrictions continued year after year because employers frequently supported them and because the unions were superior as a bargaining unit to any single group of employers. Primarily, however, these rules remained because the industry offered incentives to restriction.

CHAPTER IX

THE STRUGGLE FOR "RECOGNITION" AND "INDEPENDENCE" — THE CLOSED VERSUS THE OPEN SHOP

THE contest for control in the building industry still rages about the issue of the closed shop. In few other industries is this contest so important and nowhere is the struggle more costly and involved. The unions had an early start in organization, and, before the building-trades employers were aware, the closed shop with its attendant control of detailed job processes was already established in the larger building centers. In other industries, particularly in manufacturing, the employers were able to curb the closed-shop movement quite successfully. But in the building trades, employers' opposition did not become effective until 1900.

It may be safely asserted that only a small number of employers in the building trades have been converted to unionism as a matter of principle. Many accept unionism because it insures some degree of stability and certainty in competitive conditions; a still larger number accept it through economic pressure. Therefore, "rear attacks" and guerilla contests over this issue occur periodically in those communities where the balance of power is resting too heavily with one side.

This struggle for control is befogged by many irrelevant issues. In the first place, economic theories applicable to other industries, but not to the building industry, are drawn into the controversy. In the second place, "outside influence" is exerted. A closed-shop building industry is, in many instances, a threat to the open-shop manufacturing industries in the same community. Therefore, open-shop leaders in other industries find it convenient to "correct" conditions in the building trades, as a means of keeping the closed shop out of their

establishments. The issue is also clouded by generalizations concerning competitive equality and by definitions which find little application in actual practice. And finally, much is made of the contention that closed-shop as compared with open-shop conditions are responsible for a delayed building program, for lessened construction, for higher construction costs, higher rents, higher building-material prices and lower efficiency.

The following pages will appraise these issues in the light of available evidence, explain the conditions which have given the building-trades unions the upper hand in the struggle thus far, examine the situation and employers' attitudes in certain specific open- and closed-shop centers and evaluate the defenses made on behalf of each side.

1. History and Extent of Closed-Shop and Open-Shop Control

The union demand for the closed shop is not of recent origin. Labor historians point out that it has been among the first demands of workers wherever they have succeeded in organizing. In the building trades the unions first attempted to exclude nonmembers from working at particular crafts and later from building construction generally. Finally, they attempted to unionize the manufacture of products used in building, by refusing to erect goods made by nonunion men. Previous to 1890 few organizations existed long enough to enforce the closed shop. The national associations of contractors and in many cases the local associations added impetus to the movement by giving preference to union members on account of their skill. This preference greatly increased membership in the unions of Boston, Chicago and New York, and made them sufficiently strong to force preference upon the unorganized employers.

Control having once been attained, attempts to wrest it from the unions were only temporarily successful. In San Francisco the unions maintained uninterrupted control until 1921. In Chicago the 1900 struggle taught the contractors no lesson, and

the unions regained their power after two years; the lapse of union power caused by the "Landis Award" also proved temporary. The only serious challenge came in 1903 in New York City, but the employers disavowed any intention of destroying the closed-shop monopoly. In 1916 the Boston employers organized specifically to deal with unions on the closed-shop basis. Cleveland and Indianapolis maintained their closed-shop building industry, in contrast to the generally unorganized conditions in the other industries.

The contest has not been without casualties for the unions, however. San Francisco is today an "open-shop town," according to any definition of that term. In other communities the more highly skilled trades, only, secured "recognition," but continued to work with nonunion men in other trades on the same structure. The several open-shop "drives" before 1921 had only a slight effect on conditions in the building trades, at most delaying the extension of the closed shop into new localities. That in 1921, however, was more effectively organized, and more skillfully generaled than any previous effort.[1] This drive cost the unions much in membership and broke their control in several cities, among them Milwaukee, San Francisco, Detroit, Minneapolis, Philadelphia and, for a time, in thirteen trades in Chicago.

Changing industrial conditions give increasing or decreasing control to the unions; however, recent indications in the building trades are that the closed shop is in the ascendency. The latest figures, compiled by the open-shop department of the National Manufacturers' Association, indicate that in 1926 69 per cent of the volume of construction was erected under closed-shop conditions. This shows a gain of 9 per cent over 1925 when the unions controlled 60 per cent of the construction volume.[2] The largest increase in union control came during the war, but the losses suffered during the open-shop drive in 1921 partly wiped out that increase. But since 1922 the building-trades unions have made some notable gains in power.

2. Definitions

The variety of closed and open shops gives rise to confusing definitions. The various shades of meaning attached to these terms make it essential that the distinctions correspond to actual practice. Is the closed shop operated with an "open union" or with a "closed union"? Must the worker be a union member when hired, or may he be employed and join the union later? Does the employer practice any discrimination in favor of union or of nonunion men? Is the open shop in question one that is really and genuinely open "with no questions asked" or is there a limit beyond which the employer will refuse to hire union men? Will the employer continue to refrain from inquiring about union affiliation, even when he is aware that more than 50 per cent of his workers are union members? If an open shop, is there any recognition of a trade union at all, or is all the negotiating conducted on the basis of individual bargaining? Greater clarity of thought would result from taking as the basis some definite test. One of the best is that of a man's chance to get work. On this test we may classify the various kinds of shops in the following order:[3]

(a) *The Closed Anti-Union Shop.* In this shop all union men are blacklisted if their union affiliation is known. Their chance of getting work is equal to zero. That such shops exist is evident from the practices of many employers, and the reluctance with which workers admit their union membership.

(b) *The Preferential Nonunion Shop.* Preference is specifically given to nonunion workers. Union men are hired only if the supply of nonunion men is exhausted. Many "bona fide" open shops revert to this type when they discover that the proportion of union men in their working force has reached a certain point beyond which it would be "dangerous" to permit an increase in union men. A union man's chance of finding employment is slightly better than in the first class, but still inferior to that of a nonunionist.

(c) *The Genuine Open Shop.* No discrimination is shown between union and nonunion men. This is the real open shop which employers contend they have always championed, but which in actual practice is not universal, as claimed. In this shop the ability of the union man to secure employment is at least equal to that of the nonunion man, and no inquiry as to membership in a labor organization is made. San Francisco building-trades employers, fully aware that the openness of the open shop is questionable, sponsor the "American Plan," supposedly really open, and therefore differing from the term as applied in the rest of the country.

(d) *The Agreement Open Shop.* This type goes one step further. The shop is open; that is, nonunion men are able to secure work and need not join the union at any time. The employer is not compelled to hire union men exclusively. It differs from the preceding classes in one vital respect. The union is "recognized"; a regular trade agreement arrived at by collective bargaining establishes wages, hours and working conditions. There is no instance on record where such a shop operates in the building industry, but this type does exist in other industries.[4]

(e) *The Preferential Union Shop.* In such a shop, preference of employment is given union workers, and their opportunity of getting work is greater than in any of the above classifications. Here the nonunion man's ability to find employment is nil if union men are available. This form was originally introduced to overcome several objections to the closed shop. Employers, however, do not favor it; because during normal times, when the supply of labor slightly exceeds the demand, this virtually results in a closed shop. Its particular value is psychological, in that the employer is still free to hire nonunion men if the union cannot supply his demand for workers. But the same advantages are secured in a closed-shop agreement which grants the employer freedom to hire nonunion men if the union cannot meet his demands. However, in the preferential shop it is understood that the nonunion men are not compelled

to join the union, as they are under the closed-shop arrangement.[5]

(f) *The Closed Union Shop.* Here the union man has exclusive claim upon the available jobs. Its exact opposite is the closed nonunion shop. Under normal conditions the employer is not barred from hiring nonunion men; but once hired, these are by agreement or practice expected to join the labor union within a reasonable period of time. Where the closed-union shop is accompanied by a "closed union" the employer is denied the right to hire nonunion workers. This is a perfect form of labor monopoly.

Even a casual acquaintance with industrial-relations practice will convince one that there are many closed shops varying in openness to nonunion members, as well as open shops varying in openness to union members. This is significant, for the open-shop advocates stress the existence of the third and sixth groups primarily. The "open shop" is generally interpreted to be genuinely open, overlooking the various types of open shops which are open only to nonunion workers or have a preference for them.

3. How Open is the Open Shop?

The unionist believes that the so-called open shop is not open, and even if it is at the beginning, it cannot long remain so. To him there is only one kind of shop — the shop closed to nonunion men or one closed to union men. It is for this reason that he advocates the use of the term "union shop" and "nonunion shop" in place of "open" and "closed" shop. Either one is a closed shop. The theory is that all open shops tend, in the long run, to become nonunion shops. President Gompers, writing to Newton D. Baker, president of the Cleveland Chamber of Commerce, during a controversy on this question, said:

> The shop is only an open shop so long as there are in it sufficient nonunion men to make it so. The employer who is determined not to operate a union shop is bound to see to it that at best only a small

minority of union men secure employment in his shop. . . . He is bound to forget [his public utterances on the open shop] . . . as soon as union men seek to enter his shop in sufficient numbers to minimize his nonunion majority. . . . I grant you there may be isolated exceptions where there is actual and honest open-shop operation, where there really is no discrimination against union men and where the terms and conditions of work put forth by union men as the minimum of justice are provided without question and without any demand on the part of the workers. I do not believe, however, that there is anywhere any such shop in which at some time, sooner or later, the issue will not arise as to whether finally that shop shall be union, or nonunion, and sometime sufficient union men will find their way into the shop, or sufficient nonunion men in the shop will become union men, to force the issue of unionism.[6]

President Gompers denied that there are two positions which one may take on this subject. One cannot reject the shop closed against union men and yet accept one which will eventually cause their complete exclusion. "It is much like shrinking from instantaneous execution while welcoming a gradual suffocation."

The entire controversy is based on a categorical denial by labor that the open shop is a possibility. It is an ideal, but contrary to usual practice.[7] A union which had experience with open-shop and preferential-shop agreements in its industry comes to this significant conclusion:

To tolerate the existence of a union when it is weak and without power to interfere with the acts and regulations of management affecting the workers, is one thing. To permit that union to grow strong and to seek to extend its control over the workers as a step toward exercising control over management, is quite another. The theory of the open shop as a permanent arrangement presupposes a stable balance of power as between the employer and the workers, if not a safe preponderance of power on the side of the former. It breaks down in practice as soon as one or the other party attempts to alter the balance. It breaks down when the employer feels himself sufficiently powerful to endeavor to rid himself of whatever restraints the activity or the mere presence of the organization imposes on his freedom. It breaks down, likewise, when the or-

ganization gains in power relative to the employer and uses this ascendency to secure from him recognition for itself and concessions for its members that he would not voluntarily grant. In practice, therefore, the tendency of an open shop is either to degenerate into a nonunion shop or to develop into some form of union shop with union recognition or participation.[8]

(a) *The Situation in the Building Trades.* We do not find all the mentioned types of open and closed shops in the building industry. This is due primarily to the relatively high degree of organization and the prevalence of union rules which prohibit union men from working in the same trade with nonunion men. As a result of these rules a job is either all union or all nonunion. If an employer refuses to sign a closed-shop agreement and hires nonunion workers, he is automatically deprived of all union workers on the same job. The Landis Award trades in Chicago, between 1921 and 1926, were not really open-shop trades but rather nonunion trades.[9] Where an agreement exists, the trade is all union, since the unions in the building industry refuse to sign agreements which recognize the open shop. The open shop can, therefore, exist only in localities where no union agreements are in force, for since the union cannot compel recognition, neither can it force its members not to work with nonunion men. Minneapolis and San Francisco, for example, are two such localities. Detroit is closed shop in some trades and nonunion in others.[10]

The best illustration of open-shop operation in the building trades is found in the iron-erecting trade. When the National Erectors' Association broke off relations with the Structural Ironworkers' Union in 1906, it established the open shop in New York City and in several other localities. In this trade there appears to be little discrimination against union workers. The president of the ironworkers' union of New York is credited with the statement that more than 80 per cent of the ironworkers in that city are union men. San Francisco is the outstanding example where the building industry of a whole

community is operated on an open-shop basis. Nevertheless it has been authoritatively stated that from 60 to 65 per cent of the building workers in San Francisco are members of unions. There are several other instances which might substantiate the claim that the open shop can be operated in the building industry with little or no discrimination against union workers.

4. The Open Shop and Collective Bargaining

Assuming that an open shop might be fair, the unions predict that its universal adoption would abolish collective bargaining. Collective bargaining is the very foundation upon which unionism rests. Without it the entire union structure would crumble. Precisely what is the relationship between the open shop and collective bargaining?

Before discussing the general theory involved in this question, it might be well to cite some actual situations. As stated above, members of the National Erectors' Association operate open shops in several cities, without discrimination as to union membership. The men are hired individually, their wages and working conditions determined by the employer without negotiating with the workers' organization. The union, as a union, is not recognized. In some cities this condition has existed since 1906; in others it is of more recent origin. In this instance the open shop, the genuine open shop, substitutes individual bargaining for collective bargaining. It deprives the union of its primary function.

The Industrial Association of San Francisco in enforcing its American Plan has at no time been accused of discrimination in favor of nonunion building workers. However, since 1921 there have been no collective relations between the employers and the building-trades unions. Wages, hours and conditions of work are determined by the Industrial Association, representing all the employers in the community. Here, also, the open shop ended collective bargaining.

From 1921 to 1926 thirteen important trades in the Chicago building industry were "outlawed" by a Citizens' Committee and declared to be on the open-shop basis "permanently." If the unions had not themselves prohibited their members from working with nonunion workers, those trades would have been under the genuine open-shop basis. But there was no assurance that collective bargaining with the outlawed trades would have been established. On the contrary, the public statements of the Committee were explicit that "no recognition" would be given the unions affected and that the employers should thereafter make only individual bargains with their workers. Here also the carrying out of the open-shop idea eliminated collective bargaining.

In citing these instances we assume that collective bargaining is carried on between an employer, or his association, and a bona fide organization of labor. It has recently been contended that this assumption is too narrow, that collective bargaining may be carried on through some form of employe representation or "company union." [11] But few students of the subject, much less the participants in these "unions," are willing to admit that the effectiveness of the two types is comparable.[12]

The refusal of an employer to deal with his workers "through any other instrumentality than that of his own choosing" seems defensible. Only those directly affected should have a voice in the matter. "Any other course invites interference and meddling by professional mischief makers." However, the revision of disputed wage rates and the adjustment of working conditions "call for moral firmness, technical experience and tactical competence on the part of the negotiators. On all three counts a spokesman-negotiator chosen from the workers is at a grave disadvantage. . . . He cannot bring to his task the courage of one who has nothing to fear from an employer's displeasure. His technical experience is limited," whereas an employer acts "upon advice of counsel." [13]

Even if "shop collective bargaining" is assumed to be superior to that conducted by bona fide labor unions, this type could not be applied in the building industry. "Company unions" are most effective in large establishments. Building-trades employers have a very small permanent force, if any at all. Moreover, the labor force has no permanent working abode but shifts about from place to place. The establishment of a shop form of collective bargaining, as suggested in the Works' Council program, is impossible in the building industry.

If, therefore, collective bargaining is to exist for the building trades, it must be conducted with the regular trade-union organizations. "Collective bargaining with representatives of their own choosing," as interpreted by the unions, means the closed shop. As interpreted by the employers, it means collective bargaining that does "not abridge the freedom of contract" — the open shop.[14] Thus far, at least for the building industry, the open shop and collective bargaining appear to be incompatible. "We have never been able to negotiate agreements on the open-shop principle. I cannot see how agreements mean anything without having the force of an organization behind them," said a prominent leader of the building-trades unions.[15]

The closed shop is necessary if the union is to enforce discipline. In factory organizations a union worker can use moral pressure and various forms of social ostracism on a nonunion worker. Moreover, the nonunion worker is subject to various annoyances which reduce his earnings; his machine is out of order more frequently and his errors are reported to management more often. In the building trades such tactics of discipline are less effective. The workers are not within four walls for a period of time long enough to permit "punishment." The jobs are intermittent and scattered.

The building trades unions say that they need the closed shop in order to enforce the standard rate of pay. The incentive to accept a lower rate is great. Union expulsion for such violation

is not a sufficient deterrent, for, under open-shop conditions, work can be found elsewhere. In a closed-shop community, however, a "man without a card is a man without a trade." The threat of exclusion from a trade is much more effective than social ostracism and loss of benefit provisions.[16]

The closed shop is a protection against "victimization," a defense against discrimination. An employer can show his favoritism by assigning the best places of work to nonunion workers, giving them more rapid promotions and higher wage differentials. In addition, there is the sentimental argument in favor of the closed shop; namely, that the unionists secured their wages and working conditions as a result of much sacrifice and effort, and that the nonunionist is profiting by their sacrifice without contributing anything to the union's support and is even jeopardizing these gains.[17] The union looks upon the closed shop as a worker's protective tariff. No more effective enforcing device has thus far been developed.[18]

But the closed shop, it is held, does not materially increase the prosperity of the workers involved. The difficulties in making a statistical comparison between open- and closed-shop trades in the building industry are apparent. While it is relatively easy to discover the facts with regard to the unionized trades and localities, in nonunion districts there are usually no published wage rates. Where such rates exist, there is no obligation upon the employer to maintain them for any definite period of time.[19] Moreover, nonunion wage rates may be influenced by the existence of unions in the locality or by the proximity of a unionized city. For example, in the iron-erecting trade of New York City the wages paid by the open-shop contractors are in many cases equal to those demanded by the ironworkers' union. In this instance the union, though not recognized, is sufficiently strong to make its threat of a strike effective to the extent of securing wage increases. What is more important, the presence of union contractors who pay union rates forces open-shop contractors also to pay such rates, in order to get labor.

In some districts, however, the open-shop wage rate is noticeably lower than for comparable closed-shop districts. In San Francisco there have been actual decreases for some trades since the new régime began in 1921.[20] The contention is made, however, that if the yearly instead of hourly earnings in open- and closed-shop communities were compared, the former would show more favorable yearly earnings. Unfortunately, available data lead to no definite conclusions. The educational movement to encourage winter building affects closed- as well as open-shop communities. Moreover, the largest buildings in the country — those on which it is profitable to install safeguards, to make winter building possible — are, in many instances, erected by closed-shop builders. So that neither in hourly wage rates nor in yearly earnings is the open-shop worker shown to surpass the closed-shop worker.

5. The Employer and the Closed Shop

The building-trades employer does not set himself up as a defender of individual liberty, nor does he assail the monopoly feature of the closed shop upon the principle that it is in restraint of trade and hampers "free competition." On the contrary, his scruples do not hinder him from himself becoming a party to monopolistic arrangements, not infrequently with the connivance of the union. The employer objects to the closed shop because it limits his control over industrial problems. We have already indicated in Chapter VIII how effectively the union circumscribes the employer's jurisdiction over working conditions.

It abrogates his right to select his workers. His disciplinary power is curtailed and his method of compensation regulated. These may even introduce an element of speculation into his business and reduce his feeling of responsibility for the prompt performance of his agreements. Moreover, "if the source of control were immediate, that is, if it were lodged in the group of workers with whom the employer deals, so that it might be

possible to show the consequences of an action to its members . . . the employer might feel that the loss would at least have an educational effect . . . and repetition might be avoided." [21]

But can the closed shop exist without limiting the employer's initiative in the conduct of his business? Is it correct to assume that restrictions on managerial powers and petty annoyances would not appear under open-shop conditions? The facts show that the closed shop produces these restrictions only in so far as it strengthens the unions. Labor organizations operating on the basis of the open shop have been almost as restrictive as the unions in the building trades. The railroad unions, for example, have never espoused the closed-shop principle. Yet railroad managers frequently complain of union restrictions on their freedom of action. This group of unions is sufficiently strong to compel observance of its rules, without having to resort to the closed shop. The unions in the building trades, however, to secure strength feel the need for the closed shop. That weapon gives to them the organizational unity, the effective control over membership and shop conditions, which permit the enforcement of their working rules.

That these rules are restrictive is due to the manner in which they are created and to the position which the unions occupy. The unions have not yet attained a status where their activities can be essentially constructive. Many of them are still fighting for recognition, and even where this has been won, its continuance is uncertain. They are still primarily a policing force, attempting to enforce a few "don'ts" to protect the economic position of their members. From the managerial standpoint unionism and the closed shop are a hindrance to freedom.

6. Do Building-Trades Employers Want the Open Shop?

Chapters XII, XIII and XIV in this book, dealing with the progress of industrial relations in three leading building centers, indicate that contractors are not unanimous in their support

of the open shop. On the contrary, it is frequently asserted that if the building contractors were to formulate their own labor policy without interference from employers in other industries, there would be an even wider endorsement of the closed shop in the building trades than at the present time.

New York contractors had the opportunity to institute the open shop, on a number of occasions. Neither during the lockout of 1903 nor on any subsequent occasion did the employers take advantage of their power.[22] The Chicago situation points to the same conclusion. The presence of the Citizens' Committee to Enforce the Landis Award in 1921 proved not only that the contractors would not pledge themselves to any program which sought to establish the open shop in the building trades, but also that open-shop policy could be maintained only when an outside organization, securing financial support from other industries, injected itself. When the full intent of this Committee became apparent, contractors made private arrangements with the unions, in violation of their pledges to the open-shop committee. Later, the contractors' association, including a majority of the leading employers in every trade in the industry, also committed itself to a closed-shop policy. To many observers the events in Chicago building trades, more than those in any other city, exemplified the contractors' attitude toward the closed shop.

The San Francisco situation is somewhat more complicated. One cannot state that the thirty years of union control in that city received the unanimous approval of the employers in the building industry. But the events since 1921, the energy with which "outside interests" had to force the open shop into the building industry and the methods they had to use, indicate that without extralegal means the building-trades employers would not adopt an open-shop policy. It may be predicted that if the outside pressure were removed in San Francisco, the closed shop would again be established.

Similarly for the situation in Cleveland. In that city the con-

tractors resented an effort made by the Chamber of Commerce to introduce the open shop into the building trades.[23] The investigation of the Chamber of Commerce was originally inspired by the fact that contractors were not in favor of the open shop. "We found both the contractors and the unions desirous of conducting their negotiations by themselves and unwilling to give serious attention to the demands of the Chamber of Commerce aiming to safeguard the public interest," states their report. In other words, the builders were unwilling to permit other business groups in the city to meddle with their labor policy.

These are only four out of many cases which might be cited to show the employers' attitude toward the open shop in the building industry. What prompted such an attitude?

(a) Probably the most important explanation is found in the competitive structure of the industry. We have already indicated the practices often adopted in order to secure a contract. To prevent a loss builders are compelled to reduce their labor cost through various methods such as "lumping," wage cutting, overtime at less than the overtime rate, employing "green hands" at less than the standard wage, and working longer hours. And where wages are such a high proportion of costs as in the building trades, the employer who can reduce wages gets the trade. There is no effective way of preventing such cutthroat methods under open-shop conditions. The "legitimate" and stable contractor, whose employment conditions are fair, is constantly endangered by the operations of this group, which is unusually large in this industry. What can he do about it? The closed shop comes to his rescue by enforcing uniform conditions on all contractors big and small, fair and unfair, efficient and inefficient. The wage scale, working conditions, overtime regulations and other rules which enter into the employment problem are enforced equally upon all.[24] As a result, employers can estimate the labor cost of their competitors and can figure more intelligently on their own work. In this industry, where

the subcontract system is so important, the union shop raises the plane of competition by standardizing those elements which make up the money cost of labor.

(b) Long-time trade agreements give the employer a degree of stability which makes intelligent planning of work possible. Without an agreement, states one contractor, "it would be practically impossible for any contractor to undertake a lump-sum piece of work extending over a long period of time. Frankly, I believe that it would be impossible for any contractor to have even the appearance of working under 'open shop' on any work of magnitude, except under peculiar local conditions." When "work is scarce . . . mechanics would be willing to work at rates of wages considerably lower than those now officially prevailing. On the other hand, as soon as the house-building season starts . . . the mason and carpenter will be very extensively employed; and, under an open-shop arrangement, wages would immediately jump. In 1919 in some cases on so-called independent or open-shop work, they rose to a rate of $15 and $20 per day. How could an industrial or large size contractor exist under such conditions as that! Only on the undesirable 'cost-plus-percentage' basis." [25]

(c) Many employers favor the closed shop because the union assures them a fairly constant source of skilled workers. Through years of operation the unions succeeded in including practically all the skilled workers in their membership. Open-shop contractors employing nonunion workers had often to rely on the presence of skilled union workers to supervise their less skilled nonunion employes. While it is less true today that the union has a monopoly over skill, union headquarters is still the largest and most dependable agency for supplying the employer with skilled workers. A prominent builder states that getting workers from the union "would be much more satisfactory both from the standpoint of estimating the cost of our work and of carrying it out, as we could draw from a personnel of long established groups of employes." [26]

(d) The open shop in many places produces constant guerilla warfare. At every opportune moment the unionized men will attempt through strikes and stoppages to establish the closed shop. The situation in the iron trades in New York City is a case in point. The threat of strikes in open-shop trades is so constant that contractors must specialize in strike-breaking activities. They maintain a corps of detectives, foremen and strike breakers schooled in the arts of industrial warfare. The direct cost is tremendous, but perhaps not as large as the loss incurred through the hesitation of owners to give their contracts to firms whose production schedule may be disrupted. The closed shop creates more stable industrial relations by eliminating this incessant guerilla strife to organize nonunion establishments. To maintain an open shop an employer must whip the union and keep it whipped indefinitely.

(e) Even if the union and nonunion men continue to work together and open warfare does not occur, the inherent antagonism between the two groups causes constant friction, bringing about lowered morale, increased cost and much industrial unrest. Indeed, the cost of friction is so high that open-shop employers refuse to run their establishments half union and half nonunion.

(f) The opponents of the closed shop claim that its chief advantage is the possibility of making collusive arrangements with the union. It is true that exclusive agreements and the closed shop can go together. The closed shop becomes a weapon which organized employers use to compel "independent" contractors to join the association, to collect debts, to regulate competitive practices and to enforce association policies upon nonmembers. Such, however, are instances of abuse, which are becoming less numerous with the increasing supervision of local agreements by national unions and the broadening in viewpoint of labor and employers' associations.

(g) If the closed shop with its restrictive rules should increase costs, they could be passed on to the building owners.

The incentive to oppose the union is, therefore, decreased. To the employer, stability in wage rates and working conditions is more important than costs. To the building owner, the possible increase in cost on account of closed-shop conditions is of much less significance than the loss from indefinite delays caused by industrial unrest. If the building public would support an open-shop program, the contractors would have less incentive to support the closed shop.

(h) The increasing number of contractors who do an interstate business compels them to accept the closed shop. A contractor operating under the closed shop in New York City must operate under the closed shop in Minneapolis, although in that city building is generally carried on under open-shop conditions.[27] However, if the New York contractor were to work open-shop in Minneapolis he would risk a strike of his union workers in New York. To protect himself he operates closed-shop in all localities. This need for uniformity accounts for some of the support the closed-shop movement gets.

(i) Finally, the union "habit" has been fostered for over fifty years in the industry. Many of the contractors were themselves once union men; and unless economic conditions press them too hard, they are willing to be conciliatory toward the union closed shop. The changes taking place in the economics of the industry are not sufficiently drastic to call for a change in this policy.

7. Open Shop and Building Costs

Some emphasize as the crucial issue in this contest the relationship between closed-shop operations and the costs of building construction. While the issue of cost is important, it is not necessarily the all-important one in the struggle. Costs are not always the best criteria. If, for example, the quality of construction under the open shop is inferior or if the open shop results in the exploitation of labor, then wise public policy would dictate that costs be secondary to these other considerations.

Closed-shop construction is held to be more costly for three reasons. The first is a difference in the wage rates. Wages paid to the skilled trades in closed-shop cities are higher by 10 to 25 per cent than those paid to the same trades in open-shop centers. A more important cause of greater costs frequently cited is the difference in efficiency between union and nonunion workers, and between union men when working under closed-shop conditions and when working under open-shop conditions. A third factor is restriction upon management's initiative by working rules. When these require the employment of high-paid skilled workers to do tasks which could be done as well by semiskilled or unskilled workers at lower wages, where they prohibit the installation of cost-saving improvements, hamper the progress of work through jurisdictional restrictions or oppose piecework, time studies and the bonus system, construction costs under the closed shop are unnecessarily increased.

Cost evidence, however, is not conclusive. We have already indicated elsewhere that the available data of construction costs in open-shop as compared with closed-shop centers are of such a nature that definite conclusions are hazardous.[28] However, the absence of conclusive evidence has not prevented the appearance of much propaganda to show the increased costs of closed-shop construction. In "A Practical Test of the Closed Shop" [29] the National Association of Manufacturers attempts to show among other things that closed-shop operation discourages building. Thus, in 1923, in cities where 75 per cent or more of the building was erected under open shop, there were 47 per cent more building permits per capita than in towns where 75 per cent of the construction or more was closed shop. The accuracy of such a comparison is disputed. New York City is excluded from the tabulation of closed-shop cities on the ground that "building permits in New York City are on the highly inflated and artificial plane as a result of special tax exemption laws." No doubt, these laws did stimulate construction. However, since they have been almost en-

TABLE XVI

COMPARISON OF UNIT COST AND EFFICIENCY IN FOUR TRADES CLASSIFIED ACCORDING TO TYPE OF LABOR EMPLOYED (*a*)

	No. of Schedules	Productivity of Labor (*b*)	Wage per Hour	Cost per Unit (*c*)
BRICKLAYING				
Atlanta, Ga.				
Union Labor	8	243.9	$1.20	$5.50
Nonunion	9	142.9	.97	6.90
Mixed	6	169.4	1.05	6.44
Chattanooga				
Union Labor	9	214.0	1.50	7.30
Nonunion	2	280.8	1.32	4.81
Mixed				
Chicago				
Union Labor	10	161.9	1.56	10.28
Nonunion	3	128.6	1.52	12.15
Mixed	11	159.7	1.60	10.48
Minneapolis				
Union Labor	9	200.4	1.25	6.64
Nonunion	2	156.7	1.25	7.18
Mixed	10	193.9	1.19	6.95
PLASTERING				
Atlanta, Ga.				
Union Labor	12	5.0	$1.12	$.25
Nonunion	7	5.5	.90	.19
Mixed				
Chattanooga				
Union Labor	8	6.0	1.11	.178
Nonunion	2	5.1	1.25	.245
Mixed				
Birmingham				
Union Labor	4	5.1	....	.205
Nonunion	3	7.0	.85	.123
Mixed				
Norfolk				
Union Labor	2	6.9	1.25	.18
Nonunion	5	5.6	1.30	.23

ROOFING				
Atlanta				
Union Labor	...	....	....	....
Nonunion	12	.755	(*d*)	1.10
Mixed	2	.605	(*d*)	1.00
Chattanooga				
Union Labor	1	.63	.80	1.27
Nonunion	9	.28	.67	2.31
New Orleans				
Union Labor	11	.84	1.18	1.88
Nonunion	11	.73	.66	1.04
New York				
Union Labor	6	.42	1.25	3.43
Nonunion	4	.61	1.00	1.65
Indianapolis				
Union Labor	5	.82	.95	1.20
Nonunion	2	.65	.85	1.33
Philadelphia				
Union Labor	4	8.6	1.75	.20
Nonunion	3	6.7	1.50	.22
Cincinnati				
Union Labor	5	6.7	1.63	.25
Nonunion	3	7.7	1.50	.20
Indianapolis				
Union Labor	5	5.2	1.35	.28
Nonunion	2	7.9	1.25	.16
PAINTING				
Atlanta				
Union Labor	....	....	....	....
Nonunion	3	.34	.61	1.87
Mixed	2	.34	.83	2.43
New Orleans				
Union Labor	2	.155	.80	5.17
Nonunion	2	.34	.85	2.50

(*a*) Based on detailed figures given on pp. 6–14, *Monthly Labor Review*, Nov., 1924.
(*b*) Productivity in bricklaying means the number of bricks laid per hour.
Productivity in plastering means the number of square yards plastered per hour.
Productivity in painting means the number of ten-foot squares painted per hour.
Productivity in roofing means the number of ten-foot squares shingled per hour.
(*c*) Cost per unit is the product of the Wage per Hour and the Productivity of Labor.
(*d*) Piece rates.

tirely repealed, the amount of construction shows no material change. Chicago is also excluded from this comparison. In 1923 thirteen trades in that city were working under the terms of the Landis Award which ostensibly established the open shop. However, closed-shop working conditions and working rules characterized the major portion of the building trades. If New York and Chicago were included with the closed-shop cities, the results would be reversed in favor of the closed-shop cities.

Several investigations made to show that building costs are higher under closed-shop conditions point out that union rules and practices as well as union wage rates would naturally make them higher. But almost all such studies fail to cite actual cost differences.[30] It has already been indicated that the elimination of restrictive union rules does not necessarily result in higher productivity or lower costs. On the contrary, the only reliable figures disprove sharply the theory that union control increases costs in the building trades. In the study made by the United States Department of Labor already referred to, Commissioner Ethelbert Stewart, referring to bricklaying, says, "Unionism appears to have had very little influence in a given trade in a given locality."[31]

Table XVI is a summary of the figures given in his report giving a comparison, wherever possible, between union and nonunion workers. For bricklaying, four cities are compared. With one exception, Chattanooga, Tennessee, union labor has a higher productivity and, in spite of the higher wage rates, the labor cost per unit of 1000 bricks was from 20 to 25 per cent less than for nonunion labor. Moreover, when labor costs on jobs manned by both union and nonunion workers are compared with costs on jobs manned only by union workers or only by nonunion workers, the evidence again favors the unionized job. Comparing three cities where data were obtainable, jobs manned by both union and nonunion workers showed a lower cost per unit than jobs manned only by nonunion labor,

but a higher cost per unit than jobs manned exclusively by union labor, showing that the presence of union workers tended to decrease unit costs. In the plastering trades, however, four cities have lower unit costs for nonunion workers than for union workers. If these averages are weighted according to the number of cases studied, the cost of union labor becomes about 10 per cent higher than that of nonunion. Data for painting were secured in only one city, and showed that the unit cost for nonunion labor was less than for union labor. Roofing was studied in four cities; in two of them the unit cost for union labor was less than for nonunion and in two it was higher. On the whole, the evidence is not conclusive, except for bricklaying, where it is preponderantly in favor of union labor.[32]

While these figures refute the general belief that the closed shop increases costs, opposition is based on other grounds. Often an open-shop contractor will secure a bid, even though the figure submitted by the closed-shop contractors is lower, because there is opposition to union labor or a strong preference for the open shop. "There are many sections of the country in which it is absolutely futile for a construction company operating under a strong closed-shop basis to solicit contracts from the larger manufacturing plants. This is not because they must figure high prices to charge for their work; it is because the manufacturers are strongly opposed to the employment of union labor on their work." An examination of lump-sum bids submitted upon a great variety of work failed to disclose any advantage to closed-shop concerns. It is not the direct labor cost which produces a difference. An experienced contractor writes, "I have yet to meet . . . representatives of some fairly large organization who do business on an open shop basis, who claimed that he was able to employ non-union men at lower cost per unit of work produced than that at which he could have employed union men. In most cases . . . it was necessary to pay wages equal to the union rate." [33]

If, then, nonunion labor cannot produce work more cheaply than union labor, why is there such determined opposition to union labor in certain sections? The explanation lies in the employer's desire to have complete control over his operations. With an open shop there is no union to consult and no one to hamper him.

8. Enforcing the Open and Closed Shop

The methods of enforcing the open shop include all the devices of industrial warfare. The first of these may be called "outside influence." Such groups as Chambers of Commerce and general employers' associations, although not integral parts of the building industry, fear that the strengthening of the closed shop in the building trades will react unfavorably upon the labor policy of other industries. Architects and owners can readily be persuaded not to award jobs to contractors who work on the closed-shop basis. If persuasion fails, the economic coercion of bank credit is used. The "permit system" which withholds the necessary building materials is also an effective weapon. In those trades and localities where the open shop has already been achieved, the methods used to maintain it conform more nearly to those of industrial warfare.

The union's methods of enforcing the closed shop are too well known to need much discussion here. Probably the most effective in this industry is the sympathetic strike. This method is unquestionably responsible for the power of the building-trades unions. Unless an employer's waiting power is unlimited or unless he receives support from another quarter, a sympathetic strike leaves him helpless. A strike against one of the many small contractors is an ineffective way to enforce union standards. But to tie up the work on a whole project, affecting the general contractors and all subcontractors, brings speedy results.

Recently, there has been an increasing hesitancy to use the sympathetic strike, for it usually involves the violation of some

agreement. This form of strike was at times permitted in agreements, but the present trend is against such sanction. Interstate contractors must operate closed-shop everywhere, or else their jobs in unionized communities will be struck. The effectiveness of this weapon is attested by the fact that the more important national contractors operate under closed-shop conditions. Where the union has been recognized, a "working-card" system enforced by the job steward is a means of keeping nonunion men or union men not in "good standing" off the job.

9. Can the Union Relinquish the Closed Shop?

This is primarily an academic question, little related to the reality of the situation. There is no indication that unions are willing to relinquish, or that employers are growing more willing to grant, the closed shop. In fact, the stubbornness with which both sides refuse to yield any ground prompts the question.

We have already pointed out that the unionist feels the need for the closed shop in order to preserve collective bargaining; to him the open shop, as at present interpreted and practiced, is a serious menace to the union program, if not to its very existence. Therefore, if the union is to give up the closed shop, it must have the assurance of collective bargaining and continued life. By collective bargaining the union does not mean bargaining between an employer and his "works' council." It means negotiations between the employer and bona fide trade unions. This, of course, implies recognition of the union, for collective bargaining as generally interpreted assumes that the union is the official collective spokesman for all the workers. With this assurance the union has little to fear from the open shop. The employer then has the privilege of hiring union and nonunion men, but the union represents both. This is of considerable significance. The employer cannot play favorites with nonunion workers, and there is no incentive for not belonging to the union.

Taking into account the conditions in the building industry which have made the methods and practices of unionism what they are, the unionist feels that to give up the closed-shop monopoly, without the assurances which will protect and preserve the organization in the conduct of its legitimate and necessary function, is a sacrifice not demanded of other economic groups. However, there is a growing opinion in the general labor movement, which is only beginning to assert itself among building-trades unions, that the closed shop carries with it disadvantages as well as benefits to unionism. That the benefits still outweigh the disadvantages is unquestionable. However, it is now becoming apparent that closed-shop unionism in many localities has a tendency to persist through sheer force and not because it performs a constructive service. For many employers as well as for many workers, closed-shop unionism means compulsion; for one, to negotiate, and for the other, to join. It has also a tendency to lose its vital force, to cease activities which in the past gave it life, to forget organization campaigns and, as someone has aptly described it, to "die at the top." Union officers have little incentive to organize, they no longer need to. The closed-shop agreement gives them monopoly privileges, and membership is compulsory. As a result of this situation there is undoubtedly much truth in the contention that under the open shop unionism would have to redirect its energies to more constructive ends. But to assume that this can be done with the open shop as at present conducted is to overlook the programs, principles and tactics of anti-union employers.

The union seeks primarily a guarantee that it will not be destroyed. This assurance is provided by the recognition of collective bargaining, with the union as the official spokesman for the workers. Issues involving charges of discrimination in employment or promotion should be subject to arbitration. The consummation of such a program depends upon the existence of an employers' association, thoroughly organized and able to

control its members, and discipline them if they attempt, by the cutting of wages or otherwise, to violate the provisions of the agreement. Such an arrangement, permitting the employer to make use of nonunionists if he so desires, eliminates the union labor monopoly to which he objects; eliminates also the danger that the business agent may abuse the power given him by such a labor monopoly.

PART IV

INDUSTRIAL CONTROL

CHAPTER X

THE ORGANIZATION OF LABOR, HISTORY AND PROBLEMS

WORKERS' organizations in the building industry have a long history. Unions of carpenters and bricklayers made their appearance in the industrial centers early in the last century, and occasional references to building-trades organizations in eastern cities are found in the eighteenth century. The conditions which were instrumental in bringing these unions into existence have since disappeared, and their form of organization in many instances became obsolete long ago. Upon these early local beginnings, however, were reared many of the strong national unions of today.

1. Local Beginnings before 1900

There is no definite date which one can assign as the beginning of unionism in the building trades. For many years before the Civil War local organizations of building craftsmen arose to present specific demands and to correct certain conditions. After these were remedied the unions frequently disbanded. If they did maintain an organization for some years, they usually failed to weather a business depression. Nor did they continue their existence if they failed to secure their demands. In short, the first period of labor organization in the building trades contains but few instances of unions having permanent organizations.

Of all trades which figured prominently in this early history the house carpenters were the most active. The first organization in the building trades is said to have been that of the carpenters in Philadelphia in 1724.[1] However, this union was composed entirely of master carpenters. It adopted rules for the equalization of competitive conditions among masters,

"so that one master should not have an unfair advantage over another." It was a price-fixing association; its laws and rules show many resemblances to those of the medieval craft guild, for they provided trade courts, credits, mutual loans and benevolent features. Their "closed shop" was enforced by punishing any member who worked with a nonmember of the association.[2] The master house carpenters of Boston published in their "Rules of Work," "A price scale bearing a proper proportion to the price of labor with a due regard to the increased cost of living." [3]

The first known strike in the building industry occurred in Philadelphia in 1791 when the journeymen carpenters, although mainly aggrieved by low wages, struck for a shorter workday — "from six to six" — and more pay for overtime.[4] The strike was lost, and the strikers organized a coöperative society which advertised its work at 25 per cent less than the rate charged by the masters.[5]

The pressure for reducing the length of the working day and for improving the conditions in the trades greatly increased the number of unions after 1800. The demand for the ten-hour day became more pronounced. The carpenters of Savannah, Georgia petitioned the legislature in 1802 for an act of incorporation so that they might place their craft "upon a more respectable and recognized social footing." In 1824 the house carpenters of New York City formed a union for the purpose of achieving the ten-hour day. The stonecutters and brick masons were also active in union and civic affairs. The former participated in the celebration of the opening of the Erie Canal in 1825;[6] in 1830 they were active in the celebration of the anniversary of the French Revolution.[7] Economic conditions then absorbed their attention, particularly in 1835, when they struck for wage increases. In that same year nine journeymen stonecutters were on trial in Pittsburgh for conspiracy to fix wages.[8]

The carpenters had been working from "sun to sun." In

the winter and late fall this meant relatively few hours of employment, since most of the work was done during the long days of spring and summer, when ten to fifteen hours a day were not uncommon. The carpenters declared this system "to be grievous and slave-like," and resolved that in the future "ten hours industriously employed are sufficient for a day's work." The masters replied that the time was inopportune and inexpedient, and that they "regretted the formation of any society that has a tendency to subvert good order and coerce and mislead those who have been industriously pursuing their vocation."

Movements for higher wages and fewer working hours were carried on in New York and Boston. As late as 1825 the Boston master carpenters argued that the journeymen's "demands were fraught with pernicious evils not only with respect to their employers, but the public at large and especially themselves; for all journeymen of good character and of skill may expect very soon to become masters, and like us, employers of others; and by the measure which they are now inclined to adopt they will entail upon themselves the inconveniences to which they are desirous that we should now be exposed." [9] The master carpenters were unwilling to believe that such noxious projects "originated with any of the industrious sons of New England, but were compelled to consider it as an evil of foreign growth." [10] They argued "that if such a measure were ever to be proper and necessary the time has not arrived." Merchants and owners supported the master carpenters and even threatened to suspend building altogether and to boycott masters who yielded to the demands. Workers were imported and strikes broken.

The conditions of the ship carpenters were worse than those of the house carpenters.[11] Their grievances had mainly to do with the overtime question, "pay for rain," pay for delays, the ten-hour day and more regular employment. Thus early arose the issues which still agitate the industry — overtime, relation

of the daily to the yearly wage, effect of the shorter workday upon production, and more even distribution of work.

The merchant class refused to countenance workers' associations or to give any work to a master who employed their members. During this period owners exercised control over the employers and dictated their labor policy. The ten-hour movement, the employers declared, "strikes at the very nerve of industry and good morals; by dictating the hours of labor, abrogating the good old rule of our fathers, and pointing out the most direct course to poverty; for to be idle several of the most useful hours of the morning and evening will surely lead to intemperance and ruin." [12]

In 1834 the Philadelphia cabinetmakers opened a coöperative retail store; in the following year the New York carpenters proposed to go into business for themselves.[13] The Boston carpenters, although twice defeated, once in 1825 and again in 1832, in a strike for a ten-hour day, made another attempt in 1835. This time they were joined by other trades. In New York the movement spread from the building trades to other industries. In Philadelphia the carpenters won their demands for a shorter workday. In 1835 the stonecutters of New York struck for a shorter workday and regulation of piecework. Wage strikes among carpenters increased in 1836.

To resist the demands of these newly formed and aggressive unions, the employers found it necessary to combine. In 1836 the master carpenters of Philadelphia, fearing the power of the newly formed trades union, organized a masters' association "for the purpose of putting down the combination called the 'Trades Union.'" They resolved that the trades union is "arbitrary, unjust, and mischievous in its operations, inasmuch as it forcibly compels the well disposed journeymen to become members. We view the Trades Union as a powerful engine of the levelling system; its operation is calculated to reduce the employer to the position of the journeyman all his life." [14] The carpenters retorted "that . . . not more than half

of the journeymen have employment more than nine months of the year, and we are very much exposed to the heat of the summer sun while roofing or framing, and in the winter time we work in cold bleak shops or in open buildings without fire, or are compelled to lose time." [15] The by-laws of the union prohibited all members from working in the same building or in the same shop with any journeyman who was not a member.

Class lines were not sharp yet. In many localities it was not uncommon for employers to align themselves with the workers against the merchants who, the contractors stated, "live by working us harder and working us cheap." And the unions warned that journeymen could not be too severe with their employers "who are slaves to the capitalists as we are to them." [16] The journeyman was only slightly removed from his master, whom small reverses might reduce again to the position of a worker.

The panic of 1837 and the fifteen years of hard times following it, settled the fate of many local unions which had been active in the preceding two decades. Unemployment was particularly bad in the building trades. Many of the unions were completely destroyed and never heard of again. Some reorganized themselves into fraternal and benefit societies. Others joined the political and social reform movements which cropped up after 1840. However, with the first sign of improvement in industrial conditions in the fifties we find beginnings of "pure and simple" unionism, concentrating on high wages, shorter hours and the improvement of working conditions, and avoiding any reform movements. Unionism of the fifties was less concerned with the development of citizenship and social programs.

As the unions realized the value of a closely knit economic organization, emphasis was placed on skill and exclusiveness. The development of this point of view, however, was retarded by the depression of 1855, the Civil War and the economic disturbances during the seventies. It was not until after 1880

that the present type of unionism became characteristic. Local unions of bricklayers, plasterers and carpenters in New York City led in this development.

One of the significant contemporary developments was the increasing coöperation among employers' associations. In the strike of house painters in 1853 the employers coöperated in their opposition. Each employer refused to deal with the demands of journeymen in his employ until he had consulted with the others.[17] The same period also witnessed an increase in the number of strikes. In 1850 the Philadelphia house carpenters again engaged in a wage movement and requested the legislature "to enact such laws as will secure to the laborers their wages in the constitutional currency of the country." [18] In March, 1853, the house carpenters in New York proposed a general trades convention to consider subjects of interest, but "leaving to each trade the regulation of its own rates with employers." [19]

Many attempts were made during the sixties for some federation of the local trades in the different localities. Philadelphia and New York were particularly active in this direction. In both cases the attempts were unsuccessful.[20] At this time, also, new trades were coming into prominence. The sheet-metal workers were organized during the fifties. The tinsmiths of New York formed their organization in 1863, but when the Civil War sent the wages up to four dollars a day, the union thought it had no further function; and it disbanded. After the war many locals were organized to deal particularly with those evils created by the technical changes and competitive menaces in their trades.

(a) *Summary of Early Aims.* Summing up this first period in the organization of the building trades, we discover that their grievances concerned primarily wages and hours. The specialization of trades and crafts and the dangers from technical changes were not yet important. Hand methods and small construction units characterized building operations. The

conflict arose out of the position occupied by the middleman, who intervened between the contractor and the owner. The "independent" employer in the modern sense of the term acted more as a foreman or superintendent for the owner. He hired his workmen at stipulated wages, and since he did not purchase his own materials, his profits consisted of the difference between the amount he received and the wages he paid. Wage increases could not be shifted to the owner. The worker felt that the lot of the employer was not much better than his own. They were both the victims of the middleman, who made his profit in one case by reducing the journeyman's wages and in the other by reducing the amount of money paid to the employer.

On account of this situation workers were faced with the problem of protecting their wages. Organizations sprang up with that end in view. There was no program of social regeneration such as we find later, particularly during industrial depressions. The first spontaneous strikes of building craftsmen were wage strikes. On the one hand, they tried to protect the scale against a threatened reduction; on the other, to secure wage increases commensurate with the rising cost of living.

A second condition which prompted building workers to organize was the hardship of an unregulated working day. The sun-to-sun system prevailing in most cities before 1825, was not only arduous but had the additional disadvantage of being uncertain. Uncertainty in hours meant uncertainty in wages. Since control over working conditions rested in the employer's hands, during slack periods he could favor with jobs those who were loyal; and only during the busiest season, in the long summer days, employ those whose loyalty he questioned. At first, strikes attempted to remedy the sun-to-sun workday in summer by limiting the working day to a definite number of hours. By 1832 the ten-hour day had been won by several trades; in others the twelve-hour day prevailed.

Not until later did other issues arise. Working conditions were then defined in terms which included more than wages and hours — control over foremen, working with nonunion men, pay for overtime, rest periods during work, safety, discrimination, use of unskilled labor for the skilled trades, control of apprentices, and loss of pay, due to inefficiency of contractors. However, at no time did the importance of these issues overshadow that of wages and hours.

Finally, it must be remembered that the fortunes of local organizations of building craftsmen prior to the third quarter of the last century oscillated with business conditions. The membership was undisciplined; there was no permanency of officials, location or treasury; the unions had no definite program for waging industrial conflict; they were primarily concerned with the removal of gross abuses.

2. The Rise of the National Unions

When a sufficient number of local unions in any one trade was established, efforts were made to form a national organization in that trade. Several such attempts were made before the Civil War. The carpenters, for example, made three attempts to form a national union — in 1835,[21] 1853[22] and again in 1865.[23] At the last mentioned date, delegates from 76 local unions in ten states were present and a national union of carpenters was formed. The influence of the conservative unionism of England was having its effect. The convention urged that the national union "take steps . . . to make every local a business firm, and every individual member a stockholder." [24] It advised that strikes were fast becoming unpopular and should be discouraged. But local branches failed to support a national union.

The great depression of 1873–79 ended for a time all further efforts to form a national union. In many localities the ten-hour day previously gained by some crafts was lost. Blacklisting of former union men became common. Strikes were

broken by imported strike breakers. In the leading cities local unions ceased their activities; secret societies then came into vogue.

With the revival of business came the revival of local activities and renewed efforts to form national organizations. The carpenter was particularly in need of assistance from other centers. The manufacture of wood products in factories threatened to increase the amount of unemployment for him; it also made possible competition from "green hands." These conditions made it difficult for him to maintain union wage rates and working conditions. The solution appeared to be in the control of entrance to the trade and in the regulation of apprenticeship — problems which did not lend themselves to local treatment.

The need for national organization was urgent. Of the problems to be dealt with, first in importance was the necessity of controlling entrance to the trade. This was essential in all trades, but especially in those where it was relatively simple to learn the craft fundamentals. Local action was ineffective. The local union had no control over workers in other cities and no means of keeping them informed on conditions and strike movements in the different localities.

Secondly, after the Civil War when the industry began to thrive, more men traveled about the country in order to secure work. Plasterers, ironworkers, elevator constructors and granite cutters, unable to find enough work in one locality, were compelled to move about from city to city in search of employment. Other trades followed local building booms, and were never long enough in one place to call it home. Expositions, new construction for private or public purposes, subdivision developments and similar activities constantly called to building workers. Local unions, however, controlled only a limited area, and traveling workers could not get employment unless they joined the union in each locality where they sought work. With initiation fees $10, $15 or $20 in each locality this

was a serious problem to itinerant workers. A national union meant a passport from one town to another.

Thirdly, after 1885 the construction company whose operations extended over large areas became more prominent. Iron erectors were the first contractors to include more than one city in their operations. Their expensive equipment had to be constantly employed so that the overhead should not consume the profits. At first their operations were confined to neighboring localities. A New York contractor usually limited his operations to New York and New Jersey, or sometimes extended them as far as Philadelphia. Later, the national contractors in other trades carried on operations simultaneously in many cities scattered between New York and San Francisco.

These companies were hampered by the existence of rules and conditions which varied from town to town. They often had to meet the opposition of local union officials who resented the intrusion of "foreign" contractors and the loss of patronage to the local employer. These contractors desired uniform conditions; these could be enforced only by the national union. The latter was also benefited by the operations of the national construction company. In order to secure the good will of the unions, the national contractor had to operate on a union basis in all cities. Building-trades unions in New York, Chicago, San Francisco and elsewhere were able to force union conditions upon these national contractors by securing the coöperation of the local groups in other places.[25]

Fourthly, one of the most effective methods of solidifying the membership was by means of fraternal insurance features: strike pay, sickness insurance, death and funeral benefits, tool insurance and other devices. These methods were copied from union constitutions in England and Germany, where they were highly developed. After the Civil War American unions adopted many of these features. However, the success of these benefit schemes depended upon a large membership and intelligent supervision. Local unions could furnish neither, and had to rely upon the national unions to develop them.

Fifthly, many strikes in the building trades were lost on account of traveling workers, union or nonunion, replacing the workers on strike. Previous to the advent of the national union, correspondence between union secretaries was the only means of keeping informed on industrial conditions in other localities. A national organization became a clearing house for trade information. Through a national journal of the trade, locals throughout the country were informed of conditions and wage movements, thereby decreasing the competition of the traveling building-trades workers.

Finally, local unions were often handicapped in presenting their demands to employers and the public. The bargaining ability of the employer was often far superior to that of the union, due to his command of skilled negotiators and publicity. A local union could not afford expensive negotiation, but a national union could render much of this service at a low cost. The national union, having contacts with all parts of the country, was fully informed on industrial conditions and could intelligently carry on negotiations.

The presence of all these needs and the improvement in economic conditions in the early eighties gave added impetus to national unions in various trades. The stonecutters formed a national union in 1857, but it did not last long. The one in existence at the present time originated thirty years later. In 1864 locals of plasterers organized the National Union of Plasterers, and the closely related trades of bricklaying came together in the National Union of Bricklayers in 1865. The granite cutters organized their national union in 1877. The now powerful United Brotherhood of Carpenters and Joiners had its beginning in 1881. One year later, the Brotherhood of Painters began its checkered career.

Two unions which were to play an important part in the trade-union history of the building trades — the steam fitters and plumbers — were organized in 1888 and 1889 respectively. The sheet-metal workers had their beginning as a national

organization in 1889. The increasing use of machine-made wood products led to the organization of the Machine Wood Workers' International Union in 1890. The St. Louis exposition in 1891, in bringing together electrical workers from many cities, furnished the occasion for the organization of the Brotherhood of Electrical Workers. The increasing use of structural iron and heavy timbers in the building construction of the large cities attracted many workers to this trade and led to the formation of the conspicuous Bridge and Structural Iron Workers' Union in 1896. In the same year the Steam and Operating Engineers and the Brotherhood of Steam Shovel and Dredgemen, two closely related trades, formed their organizations.

Other trades of lesser importance followed in the succeeding years: the tile layers in 1898, the wood, wire and metal lathers in 1899, the marble workers and the elevator constructors in 1901. The present national union of hodcarriers and the union of tile roofers began their existence in 1903; the asbestos workers in 1904. The Brotherhood of Cement Workers did not begin operations until 1903 when concrete was becoming an important building material. The composition roofers, damp- and waterproofers were organized in 1907, the compressed-air and foundation workers formed a national union in 1907. All of these latter unions, however, were at a later date amalgamated with other unions in the building industry.

It is apparent that some years before 1900 the important trades already were nationally organized. By that year their local affiliations had won "union conditions" in many large cities, and the national unions had attained a degree of stability unknown in any preceding period. As new materials developed, creating new work, new crafts and new unions, other national unions were formed.

(a) *The Woodworking Trades.* The present national union of carpenters, the United Brotherhood of Carpenters and Joiners, was organized in Chicago in 1881. The history of this

union is a stormy one. It had two important organizational problems to meet. First, it was necessary to protect the bargaining power of the skilled workers already in the union, by keeping out "green hands"; and second, the national union had to eliminate the competition of several rival organizations.

During the first twenty years of its existence the Brotherhood made but little progress. As late as 1880 the carpenters in many cities were still working twelve hours a day under conditions and wages little better than those existing before the Civil War.[26] Lack of support and the localist tendencies flourishing in many cities militated against the development of a strong national organization. In order to conserve its strength during the first years of its existence, the Brotherhood made it a point to "avoid all contentions with our employers, trusting to settle our difficulties through other means than strikes." Unless a strike could be backed financially, the national union believed it folly to approve it.[27]

The work of organizing scattered locals and securing their affiliation was an uphill fight. Local unions in several cities had won the eight-hour day, but the increasing use of machinery in the woodworking shops made it imperative, according to the view of the national officers, that hours be reduced throughout the country in order to forestall unemployment. The carpenters, being the largest and financially the strongest union in the American Federation of Labor, were best fitted to lead in the eight-hour campaign which began in May, 1890.

The panic of 1893 greatly retarded the movement, and many years elapsed before the eight-hour day became the standard working day for carpenters. During the depression all efforts were directed to holding the union together. Many eight-hour cities were lost and more than half of the locals stopped paying dues. The foundation, however, was apparently well laid, for the union survived the crisis with enough funds to begin again. In 1898 the membership of the Brotherhood stood at 31,508, a loss of nearly 25,000 since the depression of 1893.

The second period in the history of this union began at the end of the last century. First, it corrected its internal organization by putting it upon a sound administrative basis, fitted to carry on the business of a growing corporation. Before 1898 all administrative functions were centered in one official, the general secretary, who received a salary. The president's office was honorary; it carried no stipulated salary and no definite duties. The general executive board was reimbursed only for time actually spent on behalf of the organization.

The second task was to establish the supremacy of the Brotherhood in the woodworking field by amalgamating rival and independent unions of carpenters. Independent locals existed in many localities, especially where the Knights of Labor were strong. The United Order of Carpenters was entrenched in New York City and vicinity. In 1888 an amalgamation was accomplished and the word "united" was added to the Brotherhood's name. Since the beginning of the Brotherhood's existence a costly quarrel, elsewhere described,[28] had been waged with the Amalgamated Wood Workers' International Union concerning control over machine woodworkers. In 1912, after many years of fruitless conferences and many industrial struggles involving not only the unions concerned but other trades, amalgamation was effected because the woodworkers realized the hopelessness of their position.

While disputing control with the Amalgamated Wood Workers, the Brotherhood had another antagonist in the Amalgamated Society of Carpenters and Joiners. For more than thirty years these two organizations involved the whole industry in costly jurisdictional disputes and, "scabbing" on each other in a manner "ill fitting labor organizations," caused untold losses to all groups. The Brotherhood, as a result of superior numbers, led by aggressive officials, supported by the other trades and employers and occupying a better strategic position due to the "foreign" taint of their antagonists, was able to defeat the English society. In 1914, after the interven-

tion of the American Federation of Labor, the Amalgamated Society accepted amalgamation, realizing that it must do so in order to protect its small membership's benefit features. The Brotherhood was now in complete control of the woodworking trades in the American building industry.

With all competition from dual unions removed, the Brotherhood entered upon an intensive organizing campaign which by 1917 brought into the organization over 200,000 new members. This large increase in membership brought financial stability and a sufficient reserve for industrial conflicts. For the year 1920 alone, the receipts of the United Brotherhood amounted to $5,743,943.28, leaving a surplus at the end of the fiscal year of nearly three quarters of a million dollars.[29]

Within a few years after the Brotherhood had gained control over the woodworkers, it unionized a majority of the woodworking mills supplying the larger cities, particularly Chicago, New York and San Francisco. Boycotting wood trim which did not bear the union label was the simplest way of accomplishing this end. Only recently have anti-boycott organizations and individual employers been able to retard the further expansion of the movement, as a result of decisions by the courts against the rule enforced by the Brotherhood which prohibits carpenters from erecting union-made wood products.[30]

Table XVII shows the growth in membership of the United Brotherhood of Carpenters and Joiners. These figures reveal the effect of business depressions upon the membership. In the history of this union from 1881 to 1927, business depressions of considerable proportions occurred in 1893, 1907, 1914 and 1920. In each of these years the organization suffered a significant decrease in membership and a cessation of all aggressive activities. Table XVIII shows the changes in the Brotherhood's membership as a result of business depressions.

The loss of nearly fifty per cent of the membership in 1893 greatly weakened the organization. It had not yet achieved

TABLE XVII

Membership of United Brotherhood of Carpenters and Joiners, 1881–1926 [a]

Year	Members in Good Standing	Year	Members in Good Standing
1881	2,042	1911	194,080
1885	5,789	1912	195,499
1890	53,769	1913	218,794
1895	25,152	1914	212,160
1899–1900	68,463	1915	194,022
1901–1902	122,568	1916	212,833
1903–1904	161,205	1917	247,240
1904–1905	161,217	1918	321,725
1905–1906	170,192	1919	346,020
1906–1907	199,823	1920	371,906
1907–1908	178,503	1921	400,104
1909–1910	200,712	1922	270,000 [b]
		1923	348,965
		1924	350,391
		1925	364,993
		1926	404,917
		1927	388,601

(*a*) Annual Reports of Secretary, United Brotherhood of Carpenters and Joiners.
(*b*) *Carpenter*, October, 1922.

TABLE XVIII

Loss of Membership during Business Depressions

United Brotherhood of Carpenters and Joiners [a]

Year	Membership	Loss
1893	54,121	....
1894	33,917	20,204
1895	26,132	8,765
1907	199,823	....
1908	178,503	21,320
1913	218,794	....
1914	212,160	6,634
1915	194,022	18,138
1921	400,104	....
1922	270,010	130,094

(*a*) From Annual Reports of Secretary.

stability. Later depressions, however, found it strong enough to weather the effects of business upheavals. The growth in membership after 1914 was greatly accelerated by the favorable attitude which the government adopted toward trade unions during the war, and the sharp decline in membership in 1921 must be viewed with this war experience in mind. The war increase was not genuine; many who joined the union were not expected to maintain permanent membership. However, since 1923 the Brotherhood has slowly recovered its former strength. In 1926 the membership was 376,400. It is now the largest union in the building industry and the largest organization affiliated with the American Federation of Labor.

(b) *The Mason Trades.* For a long time the trowel trades did not secure the same degree of unity in organization as the woodworking trades. While the Bricklayers', Masons' and Plasterers' International Union unquestionably dominated, this group was loaded with a half dozen small organizations, constantly disputing among themselves. We find the bricklayers reaching out in one direction to the stone trades and on the other to plastering. Only a short time ago, the marble workers, the tile setters and the terrazzo workers were autonomous. They have since been made a part of the bricklayers' union.

The bricklayers had the advantage of an early start in local organization, but, unlike the carpenters, made no effort to organize a national union prior to 1865. In that year, the local unions in several eastern cities laid plans and succeeded in organizing the National Union of Bricklayers of North America. By 1870 there were seventy local unions on the roll.[31] The panic and depression of 1873 caused a loss of almost 95 per cent of the membership and nearly destroyed the organization. Although at the convention in 1879 only three unions were represented, the organization did not disband but met again in 1881; and by reorganizing it survived. Stonemasons were admitted to membership in 1883, and the name changed to

Bricklayers' and Masons' International Union, with jurisdiction extending into Canada. The name was further expanded in 1910 to include the plasterers who were members of numerous local unions of bricklayers. At present the Bricklayers', Masons' and Plasterers' International Union of America is the largest union in the mason trade.

While many trades have had their work split up into specialties and while even these were threatened with extermination by the introduction of machinery, the bricklayer had to contend with comparatively few problems arising out of technical changes. The introduction of concrete was the only serious handicap. Other specialties, such as fireproofing, hollow building tile, and similar materials never threatened the bricklayer. He not only maintained control over these innovations, but also prevented the development of a class of specialist subcontractors.

Probably the most important contribution of the bricklayers' union toward stable industrial relations in the building industry was its attitude toward strikes and arbitration. In 1884 the New York bricklayers were engaged in a long strike for the nine-hour day. This strike is memorable because it established the first joint arbitration board in the building industry. The national organization declared that barring the issue of recognition of unionism, every issue could be arbitrated or settled through conference. A few years later the National Association of Builders adopted a program of arbitration; and their constituent bodies entered into local arrangements with the bricklayers' unions, for the purpose of devising methods to settle industrial disputes through conference and arbitration.[32]

The national union urged arbitration upon the locals as a means of preventing strikes. At the convention of 1895 the officers complained that a large number of local strikes due to minor misunderstandings were responsible for great losses in wages and employment. To reduce such losses, arbitration was endorsed and the arbitration procedure was made a part of the

constitution. "The International Union ordains that all subordinate unions under its jurisdiction must embody in their constitution or by-laws a general law providing for a form of agreement with employers and the establishment of a joint committee of arbitration for the purpose of establishing means whereby all questions in dispute between themselves and employers could be peacefully settled."

This program gave the national union greater control over strikes than any other union in this industry possessed. Throughout the jurisdiction of the national union, it is uniformly established that no question of strike or lockout shall be acted upon independently by the local unions involved, but must be referred for settlement to a joint committee of an equal number of representatives of union men and employers. It further holds that all questions affecting bricklayers are to be settled by that trade alone without intervention from any other.[33] By 1900 arbitration clauses were included in contracts between the bricklayers and their employers all over the country. The national union used its influence to enforce these arbitration provisions. Unless a strike was supported by two-thirds of the local union membership and approved by the national union, no financial support was given to the striking union. This was frequently sufficient to deter it from any further action.

As a result of these developments — strike control and arbitration — the bricklayers' union went a long way in stabilizing industrial relations in their trade. "Times in which the journeyman will take advantage of the busy season and employers of the dull season are now over," writes the *Journal* hopefully in 1912.[34] "Throughout the United States and Canada we have now arrived at a period when, with few exceptions, conditions of employment are settled by joint council and arbitration committees, eliminating almost entirely the possibility and necessity for strikes or lockouts, while at the same time many large construction firms that do an immense

business covering the United States and Canada take advantage of our international agreement."

These international agreements were first developed by the bricklayers' union as a protection for contractors whose business operations extended over the entire country. They guaranteed union working conditions, wages, hours of employment and the preference of union men in employment. In return for this the union promised that if grievances affecting a national contractor could not be settled locally they should be referred to the international union, work continuing until a decision was given. As a result, one-man strikes in the mason trade were eliminated almost entirely. The business agent, shop steward, or dissatisfied worker no longer had the power to "pull the job." Only after "calm, deliberate, gentlemanly, and reasonable negotiations with employers have failed utterly," could a strike be called. Only when "fundamental rights" were denied was there justification for striking.[35] This was the program adopted by the bricklayers' union during the first quarter century of its history.

To this day the bricklayers adhere to this policy. It is this policy of conciliation and arbitration rather than any other single cause which is responsible for the power and prestige of their union among employers. Its success is measurable. The bricklayers not only receive the highest wage in the industry, but are able to maintain the closed shop almost throughout the country. In open-shop centers, where the unions in the building trades are relatively unorganized, and where union men as a rule work side by side with nonunion men in the same or other trades, the bricklayers have secured recognition, collective bargaining and the closed shop.

Since 1910 the international union has made marked progress in organization and finances. Table XIX indicates the growth in members.

TABLE XIX

MEMBERSHIP OF BRICKLAYERS', MASONS' AND PLASTERERS' INTERNATIONAL UNION, 1897–1927 [a]

Year	Membership	Year	Membership
1897	23,300	1912	81,100
1898	26,200	1913	84,400
1899	26,700	1914	82,500
1900	33,400	1915	75,900
1901	34,600	1916	73,800
1902	43,900	1917	78,500
1903	46,200	1918	71,600
1904	56,300	1919	65,200
1905	54,800	1920	73,600
1906	53,800	1921	81,900
1907	64,100	1922	85,200
1908	62,900	1923	86,481
1909	60,700	1924	93,585
1910	61,800	1925	98,625
1911	75,800	1926	106,572
		1927	111,203

(a) Wolman, L., *Growth of American Trade Unions, 1880–1923*, National Bureau of Economic Research, 1924, pp. 110–111. The figures from 1923 to 1927 include only the average annual membership in the organization.

While the relations between the bricklayers and their employers have on the whole been satisfactory, other unions in the industry and the labor movement in general have not always been on cordial terms with the bricklayers. The bricklayers assured employers that if they were given recognition and a trade agreement, they would not join any local building-trades council and would not participate in sympathetic strikes. The mason contractors often reciprocated by refusing to join other employers who favored a general lockout of all trades.[36] The national officials have long urged the locals to "mind their own business" and not to tie their hands in alliances with other unions.

For many years the international union also kept aloof from affiliation with the national labor movement. In 1888 it voted against affiliation with the American Federation of Labor. At

no subsequent referendum until 1916, in spite of much favorable agitation, did the bricklayers join. The reason assigned for nonaffiliation was the same as for local noncoöperation. The union's success was attained by acting single-handedly, and it had nothing definite to gain by affiliation.

When the Building Trades Department was formed in 1908, local unions of bricklayers were permitted to affiliate with local councils of the Department, provided the jurisdictional claims of the bricklayers' unions did not conflict with those of the local unions affiliated with the Department. Since there were many such conflicting claims, local unions of bricklayers often failed to join other trades in the industry in furthering local coöperation. Much ill-feeling was engendered against the bricklayers on account of their policy of isolation.[37]

Opposition to affiliation came primarily from the small unions, because they did not wish to be involved in jurisdictional quarrels with other unions in the Department and in the local building-trades councils. In the small cities, many building trades were far behind the bricklayer in the degree of unionization and working conditions, with the result that if he affiliated with them in their trades councils, he would be compelled to "go down the line in an endeavor to lift up to his level those who had the same opportunity to organize as we had but had refused to do so. . . . We have maintained a policy of splendid isolation for years and that policy has made us one of the greatest organizations on this continent solely because we have minded our own business. . . . Are we going to throw ourselves into the melting pot of jurisdictional troubles?" [38] However, it was pointed out that if the bricklayers had affiliated with the Federation of Labor their jurisdictional troubles would never have occurred. "We would have been on the inside, and classifications of work conflicting with ours would never have been approved." [39]

In 1916 the Bricklayers', Masons' and Plasterers' International Union joined the American Federation of Labor and the

Building Trades Department, and since that time it has been a constructive force in national building-trades affairs. Probably no other organization typifies American unionism better than the bricklayers'. Having strengthened their position by eliminating the smaller related unions, the bricklayers turned their attention to winning better conditions. At the present time they unquestionably occupy one of the leading positions among the unions in the industry. Their leaders have been stable and well chosen. The present president has served for almost two decades and one secretary occupied that office for an even longer time. The union has been on a sound financial basis since 1890, and the benefits which its members receive have been increased during the last few years.

(c) *The Ironworkers.* The men engaged in the erection of iron for bridges and buildings have been conspicuous in the industrial history of this country. For many years the activities of the Bridge and Structural Iron Workers' union have attracted public attention more than those of other labor organizations. A militant employers' association has made it appear that the ironworker is the sole perpetrator of violence and dynamiting in the building industry; that graft and corruption are frequently practiced in his organization and that restriction of output is a definite policy of his union. The building worker in other trades often regards him as a pirate, "stealing" work belonging to other unions. The employer considers him as the stormy petrel responsible for all troubles in the building industry.

This reputation has been acquired in a short quarter century. When iron and steel were introduced for building construction, "bridge carpenters," whose strength was needed more than their skill, assumed control over this work. The first local of ironworkers was established in Chicago in the middle eighties. With the increasing use of iron, other locals were formed. In the early nineties several locals prospered in Chicago, Pittsburgh, St. Louis and New York.

Iron erection was carried on by national construction companies whose work extended to many cities. On account of the greater resources of these companies local unions early found themselves at a disadvantage in dealing with iron-erecting employers. To improve their bargaining power and to make the conditions existing in the different cities more uniform, five locals representing New York, Buffalo, Boston, Pittsburgh and Chicago organized the International Association of Bridge and Structural Iron Workers in 1896. In a short time, its strategic position, due to the increasing importance of iron and steel in modern building, won for it working conditions and wages which compared favorably with those of older unions.

The ironworkers' trade differs from other trades in a number of aspects. The amount of skill required is considerably less than in other trades. Whereas the usual period for training apprentices is from three to four years, in the iron trade the range is from six to eighteen months. Secondly, the work of this trade is especially hazardous. This is shown not only by the accident insurance rate, which is between 25 and 50 per cent higher than for other trades, but also by the number of fatal accidents which constantly occur in the trade. In a typical year, 1911–12, the report of the secretary shows that out of a total membership of 10,928, there were 109 deaths due to accidents. This is one per cent of the total membership; the percentage for other unions is much smaller. Facing danger daily develops in the ironworker a sort of desperate recklessness which a worker in a less hazardous occupation fails to understand. Thirdly, the large construction companies erect steel all over the country. Their workmen are migratory, and for a long time the kind of men attracted to the trade were more noted for their strength than their intelligence.[40]

In one other respect the environment of this union differs from that of every other union in the industry. Almost from the very beginning of its history, the Bridge and Structural Ironworkers' Union has had to contend with one of the most

effective employers' associations in the building industry. The National Erectors' Association was organized in 1903 and three years later launched its open-shop campaign.

Thus, before the union could develop an objective, principles, or conservative leadership, it was subjected to a life-and-death struggle with the open-shop policy of the Erectors' Association. For a long time the war, and in every sense it may be called that, was waged with dynamite, detectives, spies, violence and other equally effective forms. Neither side seemed able to win a conclusive victory. In 1912 a careful investigator for the United States Commission on Industrial Relations estimated, on the basis of figures given him by the Erectors' Association, that the union controlled 55 per cent of the steel-construction work in the United States and that the other 45 per cent was erected on the open-shop basis. This proportion is not uniform throughout the country. The open-shop firms control practically all the bridge work, for there

TABLE XX

MEMBERSHIP OF THE INTERNATIONAL ASSOCIATION OF BRIDGE AND STRUCTURAL IRON WORKERS, 1901–1927[a]

Year	Membership	Year	Membership
1901	6,000	1915	12,300
1902	11,000	1916	14,200
1903	16,000	1917	16,000
1904	11,500	1918	18,600
		1919	24,100
1905	10,200		
1906	9,800	1920	27,700
1907	11,600	1921	22,400
1908	10,400	1922	15,000
1909	9,600	1923	17,000
		1924	
1910	10,900		
1911	12,200	1925	
1912	10,900	1926	
1913	12,200	1927	21,723[b]
1914	13,200		

(*a*) Wolman, L., *Growth of American Trade Unions 1880–1923*, *op. cit.*, pp. 110–111.
(*b*) Report of Proceedings, Building Trades Department, A. F. of L., 1927, p. 55.

are no other unions to assist the ironworker by sympathetic strikes. The union, on the other hand, controls practically all the building construction work, except in a few eastern cities like New York and Pittsburgh. In New York, for causes already explained elsewhere, the open-shop erectors have maintained their control since 1906 without interruption.

The membership of the structural ironworkers' union has oscillated with the general prosperity of the industry and with the power of the Erectors' Association.

(d) *The Electrical Workers.* The International Brotherhood of Electrical Workers is the second largest union in the building industry. The increase in the use of electricity in modern buildings started about 1885. Electrical work at that time was done by the linemen for the telegraph companies. Little is known of the extent of organization among electrical workers prior to 1890. In 1891 delegates from five cities met in St. Louis and organized the National Brotherhood of Electrical Workers of America. In 1899 the organization spread to Canada and the name was changed to include the Canadian membership. For many years the union remained weak, chiefly on account of low dues. The wisdom of a high-dues policy was not generally evident at that time. Low disbursements were regarded as commendable.

Discord and rival unions prevented any progress for many years. The dissension arose out of the jurisdictional quarrels between the wiremen and linemen over the right to organize workers who were not numerous enough to form locals of their own.[41] As a result of these quarrels the organization failed to make progress and the number of locals at the fourth convention in 1895 was no larger than that at the first convention. The International remained comparatively weak in numbers and resources until 1905. It hesitated to discipline locals for failure to abide by their obligations. At the 1903 convention the president was voted a full-time salary. This marked the transformation of the International from a weak, decentralized

union to a centralized and respected organization. But other events interfered with its growth.

In 1908 the union split into two factions, and for more than five years made little progress. Eight years later, in 1913, the revolt was ended through the intervention of several groups. In that year the union had 22,700 members. Since then its growth has been continuous, and by 1920 the membership had reached the high mark of 142,000, exclusive of almost 22,000 telephone operators who form a subsidiary organization. Most of this remarkable increase occurred during the war, for in 1917 the entire membership inclusive of telephone operators was only 41,500. Table XXI gives the membership by years.

TABLE XXI

MEMBERSHIP OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, 1897–1926[a]

Year	Membership	Year	Membership
1897	1,700	1912	19,600
1898	2,000	1913	22,700
1899	2,000	1914	30,800
1900	4,800	1915	36,200
1901	7,300	1916	36,200
1902	11,500	1917	41,500
1903	18,300	1918	54,400
1904	21,000	1919	131,200
1905	21,000	1920	139,200
1906	21,000	1921	142,000
1907	30,200	1922	142,000
1908	32,100	1923	142,000
1909	13,800	1924	143,000[b]
1910	16,000	1925	142,000[b]
1911	18,900	1926	144,000[b]

(*a*) Wolman, L., *op. cit.*, pp. 110–111.
(*b*) Letter from International Secretary.

One of the most constructive efforts for improvement in industrial relations was made by the Brotherhood in 1920. At that time the union entered into a national trade agreement with the Union Shop Section of the Electrical Contractors' and

Dealers' Association. The national agreement, however, does not supersede the local arrangements, nor does it set wage rates and working conditions. It merely sets forth the "principles of right relations and defines the privileges and obligations of the parties." It provides machinery for the adjustment of disputes through conference and discussion. All agreements signed since 1920 by local unions and electrical contractors are prefaced with the Declaration of Principles adopted in the national agreement.

(e) *The Painters.* The early history of the organized painters in the United States is one of feuds and factional strife. Before 1914 the Brotherhood of Painters was constantly beset with dual unions, with local factional movements and with disputes which sapped its energy and for a long time prevented a thorough organization of the craft.

In 1871 the Grand Lodge of Painters was formed with six local unions; four from New York, one from Brooklyn and one from Paterson. But the New York and New Jersey locals were constantly at odds and the organization did not live long. A number of efforts to form a national union were made, both among the independent unions and among those which belonged to the Knights of Labor. In the latter organization the effort was carried on in secrecy because the Knights opposed the principle of craft unionism. In 1887 a convention was called in Baltimore at which the Brotherhood of Painters and Decorators was organized. The Executive Board, which had authority to govern the union between the annual conventions, was chosen from among the Baltimore members.

This was the immediate cause of a split in the union. Other sections of the country were discontented because they were not represented on the Executive Board. At the 1890 convention this discontent was voiced, but the administration machine won the day. Two years later the opposition succeeded in electing a scattered executive board and removing the general office from Baltimore to St. Louis. The old officials, how-

ever, refused to surrender their offices and retained control of the documents and funds. They also retained the allegiance of a large portion of the membership who feared the loss of their benefit claims.

This factional fight continued for several years. The American Federation of Labor favored the Baltimore group. The painters became disorganized. Then a split occurred within the ranks of the Baltimore union, and the western faction assumed control. The first united convention took place in Detroit in 1901, and for a short time the work of organizing the painters went on in earnest.

While the factions were wrangling for control, little attention had been given to constructive work. The membership of the union, starting with 600, rose to 7000 within one year, and at the time of the split in 1894 had reached 20,000. In the years immediately following, the total number of adherents of both factions dropped to less than 10,000. As hopes of reconciliation increased, gains came quickly, so that at the time of the reunion in 1901 there were 29,000 members. Two years later the number had more than doubled.

Confronted with a chaotic national organization, the painters in different localities organized independent local groups, and for many years remained entrenched, defying the jurisdictional claims of the International Brotherhood. Once the division in the International was healed, most of these local unions were induced to affiliate. However, a few proved stumbling-blocks. One of these was the Amalgamated Association of Painters and Decorators of New York and vicinity. To be kept out of the New York district was a great handicap to the Brotherhood, and a movement was set on foot to capture the New York organization.

These efforts were for a time frustrated, since the Amalgamated painters had the support of the powerful New York building-trades leader, Sam Parks, and of the Building Trades Council as well as of the other American Federation of Labor

unions in that city. In 1902 an opening appeared when the independent union struck for an increase in wages and a Saturday half holiday. The employers began secret negotiations with the Brotherhood painters. The president of the Brotherhood, J. C. Balhorn, on sizing up the situation saw that there was but one thing to do — buy the admission of the Brotherhood into the local Board of Delegates. He had $2,500 with him and he raised the rest — $17,000 in all — from the employers. Through a trick of an arbitration hearing the Brotherhood was admitted into the organization, whereupon they signed an agreement with the contractors to work for less than the Amalgamated scale. Defections in the rank of the Amalgamated occurred in 1906 and a year later it ceased to exist. Independent locals in Philadelphia, Washington, D. C. and other places capitulated soon after.

No sooner had the Brotherhood secured control over the New York locals than another problem presented itself in that city. A large number of immigrant painters and decorators found it impossible to pay the $25 initiation fee demanded by the local union. Without union membership they could not get employment. But since these were mostly Russian and Austrian Jews, class-conscious socialists, they would not work under open-shop conditions, nor would they "scab." The Brotherhood unions confined their activities to new construction. The immigrants sought work where they could, and found it in alteration and repair jobs. The Brotherhood unions did not molest them.

As early as 1907 this so-called "Group of Painters" in New York City asked to join the regular union, offering to pay individual initiation fees of five dollars. They met with a cold reception, and they decided to form their own organization. On July 1, 1910 they formed the Alteration Painters' and Paperhangers' Union of New York. Their first annual convention as the International Painters' and Paperhangers' Union was held in 1911. During all this time no effort was spared to

induce the Brotherhood to take them into their ranks. The national officers at Lafayette, Indiana, favored this, but the New York locals were not anxious to divide their work with new members; and refused to admit them on a compromise initiation fee. In the summer of 1913 the new union had more than 8000 members in and around New York. It introduced the "check-off," whereby the employers deducted dues from the wages of the workers and forwarded them to the union office.

The increase in membership came at the time when the Brotherhood locals were losing heavily by not stressing and continuing their organization work. At the same time the building boom came to an end and alteration work became of first importance. Many men held cards in both organizations. The members of the independent union still desired to affiliate. This was a paradoxical situation where an organization of 8000 asked to be affiliated with one of 3000. In 1914 the negotiations took on a more successful turn, and the two unions were consolidated. The members of the dual union were given the privilege of selecting the local they wished to join, were required to pay one dollar initiation fee and three months' dues in advance. By joining the various Brotherhood locals they secured numerical control over the New York painters' locals.[42]

The painters had their share of jurisdictional disputes. Like the carpenters, they desired to extend their jurisdiction to all closely related trades. The word "paperhangers" was added to the title of the union in 1894, but not until 1901 were the local unions of the National Paperhangers' Association chartered. Later, the National Sign Painters' Union was incorporated into the Brotherhood; then the Brotherhood obtained jurisdiction over glaziers, hardwood finishers, carriage, wagon and automobile painters, gilders and allied trades. In 1915 the Amalgamated Glass Workers' International Association, which had control over art-glass workers, was amalgamated. With

these gains the Brotherhood was free from internal quarrels, and consequently could devote its time to organization activities. The following figures indicate its growth.

TABLE XXII

MEMBERSHIP OF THE PAINTERS, DECORATORS, AND PAPERHANGERS OF AMERICA, 1887–1927 [a]

Year	Membership	Year	Membership
1887	600	1910	70,377
1888	7,000	1911	74,730
		1912	74,477
1890	9,000	1913	81,032
1892	16,000	1914	82,269
1894	20,000		
1896	8,400	1915	83,242
1897	9,900	1916	85,221
1899	16,527	1917	93,320
		1918	94,783
1901	28,875	1919	102,078
1902	43,480		
1903	62,205	1920	124,885
1904	64,843	1921	110,082
		1922	97,117
1905	59,949	1923	104,865
1906	62,522	1924	115,158
1907	71,276		
1908	68,044	1925	117,000 [b]
1909	64,441	1926	125,000 [b]
		1927	125,000 [c]

(*a*) Figures from reports of Secretary of union.
(*b*) *Handbook of American Trade Unions*, U. S. Department of Labor, Bureau of Labor Statistics, Bulletin No. 420, 1926.
(*c*) Letter from National Secretary.

(*f*) *The Elevator Constructors.* The elevator workers have one of the simplest problems of organization in the entire industry. While every other union must transact business with small contractors, who employ on the average ten workers, and are always of uncertain stability, the elevator workers deal with only a few large contractors. There are no small employers in the elevator industry. It is not cursed with a horde of fly-by-night contractors against whom there must be constant vigilance. One company, the Otis Elevator Company, pro-

duces and erects more elevators than any other firm in the world. About ninety per cent of the membership of the Elevator Constructors' Union are in the employ of this corporation.

When the first local union of elevator workers was organized in 1890 in New York City, it soon perceived that its organization problems differed from that of any other trade. Its employer could not be dealt with on the same terms as could the employers with whom the other unions dealt. From the first moment of organization the primary task was to secure the good will of the Otis Elevator Company, and once that was secured, the problem of organizing the elevator workers was relatively simple. In 1901 the International Union of Elevator Constructors was formed. By 1904 the larger cities were 100 per cent organized and affiliated with the regular central organization of unions.

The Otis Company saw the advantage of dealing with the union and entered into local agreements. But in 1904 the company attempted to test the strength of the national union. It refused to sign agreements in Philadelphia, Boston and Chicago, and when certain concessions demanded by the union were not made, a strike was called in a number of cities. The Otis Company capitulated quickly, and never since, with the exception of the Chicago strike in 1909, has it threatened to sever its relations with the union.

The membership of the elevator constructors' union has always been small. Only seven local unions, for example, were affiliated with the national organization in 1914. Only the larger cities have enough elevator workers to organize a local union. Consequently, members will attach themselves to a particular local union, though they may do much of their work in places where no local union exists. In 1919 only 55 local unions were affiliated with the national organization, and in 1926 there were 75. When one compares this number with the 2155 local unions affiliated with the Brotherhood of Carpenters

and Joiners it is easy to see the different organizational problems of the two unions. The elevator workers, however, are more effectively organized than any other union in the building industry.

To prevent too much competition for jobs among elevator workers, the national union exercised strict control from the very beginning over the affairs of the local unions. In 1904 locals were forbidden to accept new members even when necessary to meet the needs of business, unless they first applied to the national office for members from other localities. This was done to prevent an unnecessary increase in union membership and to equalize employment conditions among the different localities. Secondly, the national union extended its control over local agreements. For a time the union had a national agreement with the Otis Company establishing for the whole country uniform working conditions, except that the wage scale was governed by local conditions. At the present time the national union has almost complete control of strikes. No strike is declared without its sanction. Once a strike is declared, the national union takes complete charge, negotiates with the employers and makes the settlement.

The elevator union, however, had difficulties in defending its jurisdictional claims. Erecting elevators involved about a dozen trades, and this union had disputes with almost all of them; the machinists, the electrical workers, the steam fitters, the structural ironworkers, the carpenters, the ornamental ironworkers and others. At one time the Otis Company attempted to take advantage of this situation. This was in Chicago in 1909, when a disagreement between the company and the national union led to a strike. The company parceled out the elevator work among the steam fitters, ironworkers, machinists and others. Fortunately for the union, the other trades could not secure enough strike breakers, and the company soon came to terms. Much of the work once disputed has now been awarded to the elevator constructors, and the

TABLE XXIII

MEMBERSHIP OF THE INTERNATIONAL UNION OF ELEVATOR CONSTRUCTORS, 1901–1926[a]

Year	Membership	Year	Membership
1901	900	1915	2,700
1902	1,200	1916	2,800
1903	2,100	1917	2,900
1904	2,200	1918	2,900
		1919	3,000
1905	2,200		
1906	2,200	1920	3,100
1907	2,300	1921	3,800
1908	2,500	1922	3,800
1909	2,000	1923	5,200
		1924	8,122[b]
1910	2,100		
1911	2,100	1925	8,122[b]
1912	2,300	1926	9,484[b]
1913	2,600		
1914	2,700		

(*a*) Wolman, L., *op. cit.*
(*b*) Figures from the Reports of Proceedings, Building Trades Department, A. F. of L., 1924, 1925, 1926.

few questions remaining are being handled through the machinery for adjudicating such disputes.

(g) *The Granite Cutters.* The Granite Cutters' International Association has been particularly prominent on account of the constructive and able leadership of its president, James Duncan. Local organizations of granite cutters date back to 1820, but the national association, the Granite Cutters' National Union, was not formed until 1877.

The organization resembles the elevator constructors' union in the degree of centralization attained. This results largely from the migratory character of the membership. The national union exercises strict control over the local affairs of its membership. However, local unions have direct control over agreements with their employers, but these must first be approved by the national officers. The constitution of the union provides for arbitration of technical points which may arise during the life of the agreement.

This union was one of the first to establish agreements whose duration was more than one year, thus avoiding the hostilities which frequently occur at the expiration of an agreement. The union, one of the most democratically managed in the industry, has performed most of its business by referendum vote. There was no general convention of this organization between 1880 and 1912; constitutional revisions in the meantime were made by a committee.

James Duncan has been its leader since 1895, first as secretary-treasurer and later as president. Before his death in 1928 he was recognized as one of the most able trade-union leaders in the American Labor Movement and a thorough convert to the philosophy associated with Samuel Gompers. He was among the first labor leaders to preach high dues as a protection against strikes. He gathered a large defense fund which was instrumental in maintaining joint relations with the employers, who feared the staying power of the union in case of a strike.

Long before the nineties, the granite cutters were "recognized" by the New England employers and had written agreements defining wages, hours and working conditions. When the union began to extend its influence beyond New England, the eastern manufacturers feared that if uniform wages and conditions were established, they would be deprived of their competitive advantages over other portions of the country. They challenged the power of the organization. The bitter strike and lockout of 1892 which ensued ended victoriously for the union.

Since that time the greatest difficulty of the union has concerned the introduction of machinery, and the health hazard to those using machines. The "bumper" was a surfacing machine, so called because the excessive amount of dust breathed in had an "inevitable tendency to bump off men." The lockout at Barre, Vt., in 1907 was a result of the union's effort to eliminate the use of the "bumper." It has since been discontinued.[43] The air hammer was also objectionable on account of the effect on a worker's hands.

The union has long been embarrassed by jurisdictional disputes with other unions in the stone trades, and has repeatedly urged amalgamation. After many years of negotiation a conference in August, 1918, for the purpose of discussing the possibility of amalgamating all the stone trades, was participated in by the Granite Cutters' Union, the Stone Cutters', Quarry Workers' and Paving Cutters' Unions. But the deliberations failed to bring results and little progress has since been made in this direction.

TABLE XXIV

MEMBERSHIP OF THE NATIONAL UNION OF GRANITE CUTTERS 1897–1927 [a]

Year	Membership	Year	Membership
1897	4,500	1913	13,500
1898	4,600	1914	13,500
1899	4,800		
		1915	13,500
1900	5,900	1916	13,100
1901	7,000	1917	12,500
1902	8,200	1918	11,900
1903	9,400	1919	10,700
1904	9,900		
		1920	10,500
1905	10,300	1921	10,500
1906	11,300	1922	10,000
1907	12,600	1923	9,500
1908	13,000	1924	9,500
1909	13,100		
		1925	9,500
1910	13,400	1926	9,500
1911	13,500	1927	9,500
1912	13,500		

(a) Wolman, L., *op. cit.*

(h) *The Unskilled Trades.* In few other industries have men possessed of no special skill been able to secure recognition and to bargain collectively with their employers. In the building trades, hodcarriers, common laborers, helpers and other similar groups maintained an organization for over twenty-five years and won conditions which in many instances were better than

those of skilled trades in other industries. Obviously, since they possess no skill about which they can bargain, their good fortune must be due to other circumstances. The willingness of skilled trades to support the organization of the unskilled, and the effectiveness of the sympathetic strike account for their success. The hodcarriers, for example, rely on support from bricklayers; the plasterers' helpers, the carpenters' helpers and the helpers in other trades, rely on their respective trades for support. By the rule which prohibits union men from working on a building with any nonunion men — not only with those in their own trade — it is relatively simple to secure recognition for the unskilled workers.

As early as 1892 the laborers' unions in New York City, through the influence of the bricklayers' union, secured an agreement with the mason contractors recognizing the union and establishing an arbitration committee for the settlement of grievances. In Chicago the laborers' unions had difficulty in maintaining their membership after the panic of 1893, but when the Building Trades Council was formed and controlled the industry, all common laborers on a building job had to carry a union card. In 1886 the bricklayers of Cincinnati, for example, served notice on the contractors that they would not work with nonunion hodcarriers, and after a four weeks' strike the hodcarriers were unionized.[44]

Unions of common laborers have been organized for many years. In Chicago in 1886 and 1887 a hodcarriers' union had about 8000 members.[45] In New York City the laborers had local unions after the Civil War, but not until they joined the Building Trades Council did their organization prosper and win recognition from the employers. In 1903 twenty-six local unions, under the leadership of President Gompers, organized the Hod Carriers', Building and Common Laborers' International Union. In 1904, at the second convention, 130 local unions were represented. The organization as originally conceived was to include only common laborers employed in the

building industry. Later, the jurisdiction of the union was extended to include unskilled labor in other industries, but little progress has been made in organizing them. Two obstacles blocked the continued progress of the union. One was the organization of the laborers in special trade groups, paralleling the skilled trades, and the other, dual unions.

The unskilled workers did not wish to be designated as "common laborers." Thus for many years local unions were known by the name of the trade they assisted. There were unions of foundation workers, excavation laborers, mason laborers, carpenters' helpers, plasterer laborers and others. These organized separately and refused to be affiliated with the general laborers' group, or with the national union.[46] Only in recent years has progress been made in securing their support.

The existence of a strong national dual union of laborers which refused to join the union of laborers sponsored by the American Federation of Labor, was a great handicap. The Building Laborers' International Protective Union, composed of bricklayers' and masons' helpers, existed for many years prior to the Hod Carriers', Building and Common Laborers' International Union and competed for membership. Although the Building Trades Department put forth great efforts to get an inclusive organization of laborers, this did not deter it from issuing a charter to the Brotherhood of Cement Workers which gave them the right to organize the cement laborers.[47]

Another difficulty in the organization work of the unskilled was the multitude of racial groups among the common laborers. Had they been left to themselves they probably would never have organized. The leadership of the union was not always constructive. The national union would not compromise sufficiently to take in a large number of independent local unions or to admit those which seceded on account of discrimination. The low dues adopted also proved a bar to intensive organization work.

The International Hod Carriers' and Building Laborers' Union makes no mention of strikes in its constitution. In fact, the International pays no strike benefits and rarely declares a strike. Were it not for the aid given them by the skilled workers, the laborers' union could not hold together long. During unemployment, which is very frequent among the unskilled workers, they can be kept in the union only with great difficulty. They are expelled for failure to pay dues, for acting as strike breakers, or for selling their labor at less than the union scale of wages.

Through the influence of the Building Trades Department and several large skilled unions, the laborers' unions were finally brought together in 1916, and a period of more intensive organization began.[48] In 1922 the Bricklayers', Masons' and Plasterers' International Union pledged itself not to handle any material from laborers whose unions were not affiliated with the American Federation of Labor. Table XXV shows the membership of the leading laborers' union in the building industry.

TABLE XXV

MEMBERSHIP OF THE HOD CARRIERS' AND BUILDING LABORERS' INTERNATIONAL UNION, 1903–1926[a]

Year	Membership	Year	Membership
1903	8,200	1915	31,900
1904	12,000	1916	32,400
		1917	32,400
1905	5,600	1918	36,700
1906	9,200	1919	40,000
1907	10,200		
1908	9,200	1920	42,000
1909	7,700	1921	46,000
		1922	46,000
1910	11,400	1923	47,500
1911	12,700	1924	49,000[b]
1912	12,500		
1913	22,100	1925	61,500[b]
1914	25,600	1926	65,000[b]

(*a*) Wolman, L., *op. cit.*
(*b*) Figures from Reports of Proceedings, Building Trades Department, A. F. of L., 1924, 1925, 1926.

3. "Localism"

While the national labor unions perfected their organization many years ago, in many instances they possess a relatively decentralized structure and correspondingly weak power over the local branches. Even at the present time, the local character of the industry often makes possible a vigorous localist movement. Decisions of the Building Trades Department have sometimes been entirely disregarded by the local councils. When the New York lathers, for instance, refused to accept the Department's award giving to the Iron Workers the right to place reinforcing rods in concrete, expulsion of the lathers was suggested. But it was soon pointed out that "to revoke a charter of a New York union that offends against a decision would not settle the dispute since the suspended union would still retain the work in question and receive the support of the New York Building Trades Council." Again, when the Building Trades Department ordered the Chicago Building Trades Council to abrogate an agreement containing a compulsory arbitration clause, on penalty of suspension, the Chicago Council completely disregarded the order, and no discipline resulted. When the Building Trades Department ruled that the decisions of the National Board for Jurisdictional Awards must take precedence over all local decisions, the New York City locals, as a rule, refused to follow the decisions of the national Board.

On several occasions the national officers had to "reorganize" local unions in order to win control over them. In 1910 the national officials of the bricklayers found the New York City locals so entrenched and satisfied with their conditions of work and so converted to their philosophy of local autonomy that they refused to aid bricklayers in New Jersey against an unfair employer. Instead of striking in a body, the ranks of the bricklayers split, some heeding the order of the national union to support the sympathetic strike and some refusing to do so. A lockout resulted; the international officials

took control over the New York branches and forced a complete change of local officials.

The special conditions which made the local unions strong against the employers also enabled them to resist the demands of the national union. "Local autonomy" in the building trades is expressed in two directions. On the one hand, national officers and the Building Trades Department are limited in the extent to which they can dictate local conditions and control the actions of the local unions; and on the other hand, other unions through the local Building Trades Councils are denied the privilege of making agreements to apply to trades which refuse to participate therein. The former arises as a result of a desire to prevent "outside interference" in the local's affairs; the latter from jealousy of a central power which might infringe on the independence of the local union.

"Localism" thrived because some trades were able to secure local privileges and did not want these disturbed by national officers and national conditions. It was on this account that many local unions which had exclusive agreements with their employers opposed national control. In recent years, however, the national officers have been more successful in extending their control over the local branches. As a result, it is getting to be less true that the unions in the building trades are the most decentralized in the labor movement. The operations of the national construction company are making possible a national trade agreement and greater supervision by the national union. The latter, through the development of nationally administered benefit systems, national strike financing and negotiations for national agreements, is strengthening its control over the local branches and making more uniform the conditions which exist in the industry.

4. Wages and Hours of Labor

The local and national labor organizations whose development has been described in the preceding pages, have not only

been able to exert a controlling influence over their working conditions, but have also brought about a substantial improvement in their wage rates and hours of work. In fact, the wage scale of the skilled building-trades worker has been on the public mind almost as much as the "working rules" he enforces.

Building-trades wages, on account of several factors, are higher than those prevailing in most other occupations, organized or unorganized. The existence of irregular unemployment is undoubtedly the most important explanation. Hourly wages have been raised year after year largely on account of this situation. The second significant cause is found in the relatively strong organization of the workers. Seasonal unemployment alone would not produce the high wage scale now prevailing. But the effective organizations of the workers have been able, in view of seasonal unemployment, to force upon the industry a wage scale which in theory, at least, is supposed to give to the building-trades worker twelve months' income for nine months' work. This efficiency in boosting wages by the economic power of labor has been made possible, in part at least, by the local character of the industry. And finally, the competition for labor among the contractors, induced largely by the necessity of completing a job at a particular time, cannot be overlooked in seeking the causes for the wage situation in the building industry. The unorganized contractor, who is frequently at a disadvantage in competing for labor against the contractor who is a member of a trade association, is particularly influential in boosting wages by offering more than the recognized minimum rates. In short, the explanation for the relatively high hourly wage rates paid to the building-trades worker is to be found in the economic characteristics of the industry.

To these facts, which are useful in explaining the general upward movement of wages in the building trades, must be added several other factors which have been of particular significance

in recent years. Special conditions in building construction have been highly favorable to the wage earner in recent years. The building industry has expanded its operations more than any other field of industry, with the possible exception of the automobile industry. The index of building construction, based upon the value of contracts awarded, stood, in 1926, at a point nearly 500 per cent above 1913. Even when the increased cost of building is taken into consideration this figure represents an increase in the volume of building of approximately 200 per cent.[49] In 1927 building volume continued at the high level of 1926 and the contracts awarded during the first six months of 1928 do not presage any essential change in that year.

The essential factors, of course, are still to be found in the demand and supply for building-trades labor. An abnormal demand created by an industry which crowds more than 75 per cent of its production into four months, works hand in hand with a controlled and regulated supply produced by the labor organizations. In these factors will be discovered the reasons for the success of most building-trades wage strikes and for payment of substantial wage bonuses during the summer months. But while we must accept the influences which the normal competitive forces have exerted on wages, we must also recognize that the organizations of workers and employers have influenced these factors and thereby the wage scale. Labor organizations in the building trades have tended to raise wages and to keep them high. The wage gains of the stronger organizations have been greater than those of the trades not so well organized. But a high scale in the better organized trades has also tended to raise the rate in the lesser organized trades. In fact, the wages paid to nonunion workers in the building industry are substantially higher than those paid to skilled workers in other industries. Nonunion ironworkers in New York City, for example, receive in wages as much as union ironworkers in the same city; the open-shop

employers have found it necessary to pay the high rates in order to discourage unionization among their employes. Finally, while the trades possessing greater skill have frequently received the highest wage rates, the less skilled trades have also increased their rates through organization. Common labor in the building trades is today probably the highest paid common labor in the country.[50] And ironworkers, whose union requires only a two-year apprenticeship as compared with four years generally required by the bricklayers, receive a wage rate which is not much lower than that paid to bricklayers.

Many factors enter into the determination of the rate for any one trade as compared with another. The carpenters' wage has often been considered the basic wage, and the rates of other trades have been adjusted with the basic wage in view. In several trades the rates are determined by the existing rates in allied trades. An increase in the rate for the bricklayer will, in many cities, be followed by an increase in the plasterers' rate. An effort is made to maintain the recognized differentials which have been established by many years of bargaining. Arguments advanced for the increases to particular trades have been based on the accident hazard in the trade, skill required, training period, unemployment and similar factors. But while these have some merit in almost all cases, it is doubtful whether they have had a great influence on the particular rates established. These have been determined more by the demand and supply of labor in the trade, and by the bargaining power of the union, than by any other factors.

The following tables show the wage situation in the building trades in 1927. Table XXVI shows the hourly wage rates for the most important trades in representative cities. Table XXVII shows the index number of the rates of wages per hour for the building trades for the twenty-year period since 1907. Table XXVIII shows the relationship between the wage scale in 1927 with specified preceding years for twelve trades.

TABLE XXVI

UNION WAGE RATES PER HOUR FOR TWELVE BUILDING TRADES IN REPRESENTATIVE CITIES AND FOR THE COUNTRY AS A WHOLE, MAY 1927[a]

Trade	Average rate of wages per hour country as a whole	San Francisco	Chicago	Boston	Buffalo	Cleveland	Denver	Detroit	Indian-apolis	New York
Bricklayers	$1.603	$1.375	$1.625	$1.40	$1.50	$1.50	$1.50	$1.575	$1.625	$1.75
Carpenters	1.311	1.125	1.50	1.25	1.125	1.375	1.25	1.15	1.10	1.50
Elevator Constructors	1.433	1.25	1.575	1.50	1.35	1.525	1.75	1.51	1.41	1.50
Painters	1.349	1.125	1.50	1.25	1.125	1.25	1.25	1.25	1.15	1.625
Cement Finishers	1.379	1.125	1.50	1.375	1.125	1.25	1.25	1.375	1.10	1.50
Plasterers	1.628	1.50	1.625	1.50	1.50	1.625	1.50	1.625	1.55	1.75
Plumbers	1.409	1.25	1.50	1.25	1.275	1.50	1.375	1.50	1.425	1.50
Sheet-Metal Workers	1.33	1.125	1.50	1.25	1.10	1.375	1.25	1.25	1.15	1.50
Structural Iron Workers	1.464	1.375	1.50	1.25	1.25	1.50	1.25	1.375	1.40	1.75
Lathers	1.492	1st class 1.25 2nd class 1.094	1.625	1.375	1.375	1.625	1.375	1.625	1.30	metal 1.50 wood 1.75
Building Laborers	.854	.688	.90	.74	....	.875	....	.60	....	Rate A 1.25 Rate B 1.15
Hod Carriers	1.026	.875	.90	.79	....	.875	.844	.75	.925	1.125

(a) *Union Scales of Wages and Hours of Labor, May 15, 1927*, U. S. Department of Labor, Bureau of Labor Statistics, Bulletin No. 457, 1928.

TABLE XXVII

Index Numbers of Hourly Wage Rates for Ten Building Trades, 1907–1927[a]

(Rate of Wages per Hour 1913 = 100)

Year	All Trades	Brick-layers	Building Laborers	Carpen-ters	Hod Carriers	Painters	Plasterers	Structural Iron Workers	Plumbers and Gas Fitters	Steam Fitters	Sheet-Metal Workers
1907	...	94.2	90.2	90.7	95.2	85.3	95.0	87.3	87.9	86.0	86.1
1908	...	94.8	90.7	91.4	95.5	88.1	94.7	88.7	88.8	87.0	88.0
1909	...	95.3	90.9	92.3	95.7	88.8	95.5	89.7	90.2	99.1	88.5
1910	...	96.7	94.5	95.1	97.2	92.6	96.6	92.7	90.9	91.9	91.0
1911	...	96.8	95.6	96.5	98.1	94.3	97.1	95.1	96.2	95.1	93.9
1912	...	98.1	95.8	98.5	98.7	95.4	99.1	96.8	96.7	96.5	95.9
1913	100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1914	102	102.5	100.0	101.6	101.1	103.4	100.5	101.7	101.4	101.8	103.7
1915	103	102.9	101.4	102.8	101.8	103.9	100.9	101.9	102.1	104.1	105.1
1916	106	103.8	106.1	105.8	104.9	113.2	104.7	103.6	103.0	106.2	106.9
1917	113	107.4	117.2	115.2	117.0	117.0	107.5	109.9	106.5	110.3	111.6
1918	126	115.4	137.4	126.1	136.6	129.4	113.5	126.5	117.5	120.6	130.6
1919	145	128.2	155.8	145.9	159.8	151.4	130.9	142.6	133.0	135.4	144.1
1920	197	174.7	225.9	194.8	232.4	206.0	170.7	179.4	172.1	178.8	193.2
1921	200	172.7	227.7	197.8	237.8	212.8	180.5	184.0	181.1	171.3	202.3
1922	187	168.4	213.9	183.1	197.1	199.1	173.5	166.6	168.2	167.6	187.5
1923	207	191.1	218.1	204.0	215.4	218.7	193.2	178.4	185.6	175.6	201.9
1924	224	202.2	242.4	218.3	224.9	230.5	216.1	202.5	202.4	201.5	221.7
1925	233	213.4	231.6	222.8	251.5	243.1	219.8	204.5	206.6	212.2	229.3
1926	248	226.4	254.9	238.4	273.8	257.5	236.1	218.5	222.7	229.7	244.8
1927	257	231.9	255.8	246.7	280.4	266.2	241.0	235.5	227.2	236.2	252.2

(a) *Union Scales of Wages and Hours of Labor, May 15, 1927*, U. S. Department of Labor, Bureau of Labor Statistics, Bulletin No. 457, 1928, pp. 14–21.

TABLE XXVIII

PER CENT OF INCREASE IN RATES PER FULL-TIME WEEK IN 1927 AS COMPARED WITH SPECIFIED PRECEDING YEARS[a]

Trade	Per cent of increase in rates of wages per full-time week in 1927 as compared with									
	1907	1913	1917	1919	1921	1922	1923	1924	1925	1926
Bricklayers	135.8	127.7	114.1	79.6	33.5	36.9	20.6	14.5	8.2	1.9
Building Laborers	152.7	136.2	111.6	62.5	12.7	20.6	17.6	6.4	11.0	.5
Carpenters	165.7	143.7	112.6	69.8	25.2	33.6	20.8	12.8	10.6	3.4
Cement Finishers	144.0	126.3	112.9	74.1	24.9	34.8	23.3	11.5	11.0	4.1
Elevator Constructors	....	....	112.7	73.0	27.5	36.5	28.4	14.3	9.3	3.7
Hod Carriers	186.7	178.5	138.6	75.3	18.0	42.2	30.0	24.6	11.7	2.4
Lathers	....	142.6	123.1	86.6	29.2	37.1	24.0	15.1	5.6	3.5
Painters	189.6	152.5	117.9	69.6	24.7	32.5	20.9	14.8	8.3	3.0
Plasterers	136.7	127.6	115.3	77.4	29.2	34.3	19.9	7.1	5.7	1.6
Plumbers and Gas Fitters	146.0	122.7	111.1	70.4	25.4	32.4	22.4	12.2	9.9	1.9
Sheet-Metal Workers	181.0	145.2	121.7	73.7	24.3	34.0	24.5	13.5	9.7	2.7
Structural Iron Workers	158.6	132.7	113.4	65.2	28.1	41.3	32.1	16.3	15.2	7.8

(a) *Union Scales of Wages and Hours of Labor, May 15, 1927*, U. S. Department of Labor, Bureau of Labor Statistics, Bulletin No. 457, 1928.

An examination of the statistical tables will show that the organized workers in the building industry have been able to shift a great part of the loss caused by seasonal unemployment to the industry, to be borne directly by the consumer. What these relatively high hourly rates mean in terms of yearly income is difficult to estimate. The amount of unemployment is not uniform for the different trades. Nor is it possible to know how much is paid in bonuses above the minimum rates shown in the tables and what added income is secured through employment at overtime rates. The reduced yearly income caused by factors other than unemployment, such as labor difficulties, is also not inconsequential.

Hourly wages in the building trades have increased steadily since 1907. The combined index number for all trades in the industry shows an upward trend, which was only temporarily checked in 1922. Hourly wages doubled between 1913 and 1921; the index number for all trades in 1927 stood at 257, with 1913 as a base. The business depression in 1921 has affected building-trades wages much less than was the case in other industries; the building unions, in most instances, successfully resisted wage deflation.

That these gains have improved the building-trades worker's economic position becomes evident when the current wage rates are compared with the changes in the cost of living. In 1926 the cost of living was approximately 70 per cent higher than 1913; while the building-trades wage index was about 150 per cent above 1913. These figures make it evident that there has been a substantial rise in real wages, particularly since 1918, and while the industrial worker in other industries has increased his real wages about 26 per cent between 1913 and 1926, the gains of the building-trades worker have been considerably larger.

While the hourly wage rate of the building-trades worker has been steadily increased, the length of the working day has also been reduced. The 44-hour week (eight hours per

day and four hours on Saturday) is enforced in all the building trades. Since 1922 some of the trades, particularly the painters, lathers and plasterers, have succeeded in establishing the five-day or 40-hour week in several cities. Since 1925 other building trades have embarked on the five-day-week campaign and the effort is being encouraged by the Building Trades Department of the American Federation of Labor.

5. The "Business Agent" and Unethical Practices

The tremendous power wielded by building-trades labor organizations on account of the success with which they have enforced the closed shop, has given to the officials of these unions a control over the industry and employers which has often been abused. The local officials and business agents of the building-trades unions have frequently been charged with graft and corruption. These charges have been repeated so often and public impressions have been so definitely formed that to the onlooker, at least, the only function of the business agent appears to be that of collecting "strike insurance" and of imposing other burdens upon contractors.

The business agent in the building trades has developed with the industry. As a permanent official, charged with the management of the union's business, he came into the industry in the eighties of the last century. His existence has been called forth by three definite needs. The need for a permanent salaried official to represent the union in its relations with the employer, with other unions and with its own members was always present. The "job steward," usually the first man on a job, among whose duties were the examination of "working cards," the collection of union dues, the keeping of nonunion men from the job and the general supervision of the union's interests on the job, was unable to successfully represent the union members in their relations with the employer. The "steward" was himself an employe, subject to discharge like

other employes, although no discharge for "union activities" was permitted. But he was still dependent upon the employer for his wages; the employer could give the job steward difficult and unsatisfactory tasks and see that he was among the first to be discharged when dull times occurred. The business agent, being employed by the union, was not dependent upon the employer's good will and could represent the union worker more fearlessly than the job steward.

A second reason for the need of a separate official, independent of the employer and devoting all his time to the union's interest, was found in the rapidly increasing importance of the union working rules. As these rules grew in number and complexity an expert familiar with their nature and with the practices of the trade was necessary to interpret and enforce them. Since they are of vital importance to each craft concerned, one of the principal qualifications of the business agent is a knowledge of these rules.

Finally, the business agent came into prominence because the subcontracting system operating in the building industry made the task of vigilance, in order to protect "union conditions," necessary and difficult. The small employer, subjected to intense competition, was often forced, in order to cut costs, to reduce his labor standards. Greater watchfulness by the union became necessary. The business agent became the recognized officer to protect the union conditions prevailing in the trade.[51]

In view of these requirements, the business agent has developed into the union's chief executive officer. His duties consist of visiting the job to dispose of any disputes that may arise, to see that none but members of the union are employed, that the trade jurisdiction is not encroached upon and that the working rules are not violated. In some organizations he is an employment agent, dispensing jobs, an examiner of the kind of work done by journeymen, an organizer of the nonunion men in the trade. These activities have combined to give the

business agent much power. The knowledge of where the best jobs are to be found, his influence with the employer as to the disposition of these jobs, the special importance which the building-trades worker attaches to the more permanent job, all of these have given him a tremendous influence with the rank and file of the union members. And the employer also came to realize that the good will of the business agent was a profitable asset. For the business agent represents the union in bargaining with the contractor concerning wages, hours and working conditions. He controls the labor supply upon which the completion of the contractor's project depends. He penalizes the contractor for violation of union rules. And his influence extends beyond his own trade. He represents the union in its relations with other labor organizations; he is its spokesman in the central labor councils where he meets the business agents of other trades.

This power has given to the business agent a vital control of the trade in which he operates. His greatest influence, of course, so far as the employer and the workers are concerned, arises from his power to call strikes. The speed with which building operations are carried on and the rapidity with which a subcontractor completes his work on a large project make the reference of all disputes to the union meeting impractical. The need for quick action, which is demanded by the presence of many small subcontractors, has given to the business agent the right to call strikes. Although many trade agreements have attempted to circumscribe this right, to deprive the business agent of this power, in most localities, arbitration boards to the contrary, the business agent can still call his men off the job. This is particularly true on jobs where nonunion men are employed. And his relations with the business agents of other unions increase this power manifold, particularly in those cities where the employers have not succeeded in curbing the sympathetic strike.

These conditions, which have placed in the hands of the

business agent control over the daily relations between the workers and their employers, have also made it possible for him to abuse the power for personal gain and to foist upon the industry uneconomic and unethical practices. The building industry has periodically been subjected to "graft eras" in which those who controlled the labor supply have abused their power and levied graft upon the employers. Sam Parks in New York in 1901–03, Robert Brindell in the same city in 1919–21 are only two of many illustrations which might be cited. For various sums ranging from $100 to $500 Sam Parks called strikes and called them off, made contractors rich or ruined them. Brindell's methods were different in that they were more subtle and the "rates" were much higher.

The Dailey Commission investigating conditions in the Chicago building trades asserted in 1921, "Graft has been imposed upon builders to the extent of millions of dollars every year." And the Lockwood Committee making a similar investigation in New York City in 1921 came to identical conclusions. While the dishonest and unscrupulous element represents but a small fraction of the industry's personnel, the frequent recurrence of graft eras and the recent severe manifestation of this malady prompt an inquiry as to the economic and other causes which might be responsible therefor.[52]

Probably first in importance among the explanations for the prevalence of graft in the building trades is that to be found in the position and attitude of the union members, the rank and file. Since the methods employed by the business agents are generally known, especially since the acceptance of graft is at times recognized, the attitude of the large body of union members is pertinent. It must be realized that, even if an articulate majority were desirous of removing graft from their trade, success would be secured only after many years of struggle against great odds. The business agent is the leader of the political machine in power in the union. To dislodge him is a task in which an unorganized membership can succeed only

after persistent and organized effort. But it is probably more correct to say that the majority of the members of the building unions are not interested in the subject — certainly not sufficiently so to engage an entrenched political machine in battle. The instances in which business agents convicted of graft have been reëlected to their office, or have even had their salary continued while serving terms in prison are too numerous to convince one that the union membership is particularly aroused over the subject. While it would be incorrect to characterize their attitude as being completely one of indifference, it would be equally untrue to assume that there is a desire for a crusade against dishonest business agents. The attitude that if the business agent did secure graft, he "grafted from the boss" is too frequently met with. In the final analysis the business agent's efficiency is judged by his ability to "deliver the goods." If he has enforced the rules, secured wage advances, organized the trade and generally increased the security of the job, the average worker feels that the business agent has performed the task he is hired to do. Accepting graft is a "sideline," which is his own concern. A member of the Housesmith's Union, which Sam Parks led in 1902, described his reaction thus: "Once a workman in the iron trade got $1.50 a day. Parks rose, became our Moses, and led us into the promised land of $5.00 per day. Suppose Parks has grafted, more or less, and made a bunch of money, he did not get it out of us." In the indifference of the union worker and in his inability to dislodge the political machine of the business agent lie two strong obstacles to the eradication of unethical practices, once they are discovered.

Equally encouraging toward the existence of graft is the attitude of the contractor. That the business agent demands graft in order to "insure" a job against labor troubles is merely one aspect of the problem. That the contractor pays what is demanded, often without a sign of opposition, is the other. From the time when Sam Parks began his operations in New

York City in 1902, — for about a quarter of a century, down to the recent revelations of the existence of graft in the building trades, — contractors, heads of successful and permanent construction organizations, have succumbed to the demands of the business agent with only a half-hearted objection. To be sure, the contractor is often aware of the fact that unless he "gives" the support of the business agent will be thrown to his competitor, who might not permit his ethical standard to interfere with a practice the cost of which can be readily passed on to the builder as so much "strike insurance." As a prominent eastern contractor put the problem: "Money is the ammunition of war; and among the employers there were many who were indifferent as to whether this money was spent in fighting or in buying." Also, the contractor often succumbs to the demands of the business agent because it is the cheapest way to pay for violation of union rules. The use of nonunion material, and the employment of nonunion men, are both infringements of union rules and it is cheaper to "pay graft" and have the business agent overlook these infringements. Whatever the motive; whether it is prompted by the fact that "others do it, so I have to," or by the desire to buy immunity for violation of rules, the unwillingness of contractors to oppose the demands of the dishonest business agents, becomes as effective a bar to improvement as the indifference of the rank and file of the workers.

Probably the more important explanation for the prevalence of graft in the building trades is to be found in conditions inherent in the contracting business. It has already been pointed out that the industry is characterized by the "cost-plus" method of operation. The ease with which construction costs can be passed on to the building owner, removes from the contractor the urgency to oppose the levying of graft and makes him more ready to submit to any demands made upon him. And the owner himself is in no mood to permit the demand for graft, under whatever forms it might be levied, to

delay the completion of his structure. His investment in the building is usually large; a postponement of the completion date further delays the time when the investment becomes profitable. "Contributions" are often a much smaller addition to the cost of the project than would result from a delay in construction caused by a strike or other labor difficulties. The prevalence of many small and incompetent subcontractors, whose profit consists of the difference between what they are paid for the job and what they pay for labor, is also conducive to the existence of graft and other dishonest practices. Subcontractors who have labor difficulties find it difficult to get contracts. It is therefore "good business" to buy insurance against labor difficulties and the business agent is the medium through whom such immunity is secured. This is especially necessary when the small contractor is guilty of violating one of the many union working rules, relating to hours, overtime, nonunion materials, jurisdiction or what not. This is an especially frequent cause of graft because the working rules are subject to annual or biennial revision, a revision often made necessary by new technical methods and materials. For whatever reason, frequent changes in rules multiply the opportunities for overlooking some of them and increase the excuses for "fines" and "contributions" levied by the business agent. A particularly fertile cause of graft has been found in the rules concerning trade jurisdiction. In fact, it has not infrequently been charged that business agents create jurisdictional controversies in order to "charge" the contractor for avoiding strikes on account of these disputes. Nor can we overlook the numerous instances where graft has been paid to business agents in order to keep competition out of a certain market. Within the building trades it was once believed that this was the most important cause for the existence of graft. Contractors, individually or through an association, would rely on the business agent to keep competition out of the market.

This is the background which must be kept in mind in order to comprehend the causes which have made some practices on the labor side of the building industry notorious. It would be untrue, of course, to leave the impression that all business agents succumb to these influences. Not unlike the situation on the employing side of the building industry, it is the practices of a small minority which stand out and impress the public mind. The majority of union officials perform the functions which they are elected to do diligently and efficiently. Here also, the extension of the prestige and influence of the national union and the national officers has tended to control the more flagrant of the bad methods and in some instances has materially improved the situation.

While the extension of the influence of the national unions will undoubtedly result in improving the methods employed by the local organizations and officials, much can also be gained through a more thorough organization of the employers. The contractors who have succumbed to the demands of the business agent have in a majority of instances been unorganized contractors. The members of the stabilized employers' associations have been largely immune from demands for graft. And this immunity is due almost entirely to the policy of their association which fights the practice with all the resources at its disposal. Depriving the business agent of much of his power to call strikes, without authorization by the membership, will also probably be an effective check on his methods and will remove from the contractors the fear of direct action.

6. Summary and Conclusions

In terms of organization the unions in the building industry have achieved distinction. Aided by the relatively weak bargaining power of building employers, the local character of the industry and the usual policy of the building owner, which made opposition to the demands of labor difficult, the unions in the building trades have made rapid progress. The com-

bined membership of the seventeen international labor organizations in 1927 was more than 950,000 and at one time it had passed the million mark. In many large cities the building construction workers are, for all practical purposes, completely organized. In other cities their claim to an organized strength varying from 60 to nearly 100 per cent of building workers, cannot be seriously disputed. Through the help of skilled unions, the organizations of unskilled and semiskilled have been bolstered up in recent years, thus further strengthening the organized power of the entire group.

The national unions have consolidated their gains in the last quarter century and have successfully eliminated all dual organizations from the industry. Similarly, considerable success has been achieved in reducing the number of unions of related trades and so eliminating a constant cause of friction. Through the extension of national control over agreements, strikes and finances, the strong localist tendencies are being overcome, and greater uniformity in conditions is being introduced.

Since 1910 the national organizations have become stabilized; comparing their present situation with what it was at the beginning of this century, we see that their membership, finances, policies and strength are being less influenced by the general changes of the business cycle. The growth in membership has been steady, the large gains secured in the after-war building "boom" having been only in part relinquished in the open-shop drive of 1921–22. In 1923 the unions in the building trades had 230,000 members more than in 1913. This increased membership has been retained and even further enlarged by the favorable conditions resulting from the recent large volume of building activities.

The problems facing the building unions today are concerned both with internal organization and policies and with an improvement in the industrial program. Of the former, the reform in the methods employed to win union demands, is not

the least important. The power of the business agent, his relation to unethical practices, the careless use of the weapon of the sympathetic strike, the character of collective bargaining as practiced in this industry and the development of arbitration are only a few of the issues which are receiving attention at the present time.

The second group of problems concerning the relations between the program and methods of the unions and the welfare of the industry are also being considered. The extension of the five-day week has been a slow process, but there is increasing evidence of the unions' determination to employ this method as a partial solution of the unemployment problem. Equally significant is the desire to disavow any methods or rules which might result in a decrease of efficiency. Already one union has asserted in its constitution that it is opposed to restriction of output, and other organizations are anxious to avoid public disapproval of their trade rules and methods.

CHAPTER XI

THE FEDERATION MOVEMENT

THE craft form of organization prevalent in the building trades naturally results in a large number of unions, each functioning in its own restricted sphere and jealously watching for any infringement by other crafts upon its jurisdiction. Although there are at the present time only seventeen national unions in the building industry, there are, locally, as many as fifty distinct craft groups. For example, the Brotherhood of Painters, Paperhangers and Decorators includes also the sign painters and glaziers; the Bricklayers', Masons' and Plasterers' International Union includes not only the three trades mentioned in the title of the organization but also the marble setters and tile layers. Other organizations also have many trade groups under their control, each trade having a separate local union in the larger cities. Under the jurisdiction of the United Brotherhood of Carpenters and Joiners, for example, there are, in New York City, thirty-two local unions — of dock builders, millwrights, furniture workers, stair builders, cabinetmakers and floor layers, as well as of carpenters and joiners, although these are in the majority. Similar situations are characteristic of all large cities. Even in the smaller towns it is not uncommon to find workers in the same trade separated into two or three local branches.

1. Local Coöperation — the Building Trades Council

To secure coöperation among these local organizations is a difficult task. The painters' agreement, for example, may expire at one date; the carpenters' agreement two months later; and the bricklayers' at still another time. If the painters be-

come involved in any difficulty before their agreement expires, the other trades can give them little aid unless they violate their contracts. The manner in which the work in the building industry is parceled out among the contractors makes coöperation among the several crafts indispensable. A subcontractor may have only a few days' work; and if he violates an agreement or a union rule, before the union can hold a meeting and call a strike his work may be finished and his men discharged. Even if quick action is possible, the union program may be defeated by another circumstance. The work of each subcontractor is only a small portion of that to be done on the entire building. A strike by one union may not delay the work of the other trades sufficiently to be effective. Pressure must be brought to bear upon the general contractor who is responsible for the entire building. Such pressure can be brought about, not by strikes of single trades, but by tying up the entire job. This type of economic action, however, requires a different form of organization from that which the local craft union is able to supply.

The various locals of the different national unions in the larger cities and towns naturally made the first attempts, beginning about 1900, to unite. The District Council is the structural form developed to make it possible for local unions of the same craft to enforce a uniform policy throughout the trade. But coöperation between different trades belonging to separate international unions has been more difficult to secure.

Primarily in order to make sympathetic strikes more effective, Chicago, New York, and San Francisco unions early developed building-trades councils representing the whole industry. These, as a rule, were composed simply of business agents from the different unions. Where the unions were represented in the councils by others than the business agents, the latter usually organized informally for consultation and joint action. The councils financed their activities by selling "working cards" to the affiliated unions. Members were required to

purchase these cards and produce them, at the request of any union official or fellow worker on a job, as evidence that they belonged to the union. The business agent became a power in the industry.

The building-trades council has never been equaled in any other industry in its effectiveness. It prevented the employer from defeating one craft at a time, and made the sympathetic strike a weapon to be feared. It placed the weaker unions upon a level with the stronger in bargaining power. Some of them, particularly the bricklayers and plumbers, were able to fight their own battles. But others, such as those in the unskilled or the semi-skilled trades, could never have attained their present status if the more powerful organizations had not shielded them.

First organized as a war agency to aid unions in conducting strikes, the building-trades council soon became an agency to preserve peace, to prevent violations of agreements, to settle disputes between the unions and to represent the unions on arbitration boards. In recent years it has made trade agreements with the central organization of employers. Overshadowing the separate unions in importance, it has greatly restricted their power. For purposes of collective bargaining and wage determination the council unifies all the organizations. In effect, the increasing power of the central council has counteracted the craft limitations of the separate organizations and provided an approximation to industrial unionism. But it falls short of this, for "craft autonomy" and craft self-sufficiency have never ceased to be important. The separate unions still maintain their identity and determine their own admission requirements, government, internal organization, and discipline.

The tendency, however, is toward increasing rather than decreasing the powers of the building-trades council. Already, in New York City, the Council stipulates what shall be the term of office and the salaries of its members, whom the local

unions elect and pay. The constitution of the Building Trades Department gives the local councils control not only over inter-union disputes but also over wages and hours. Section 34 of the constitution adopted by the Building Trades Department to govern local councils provides that all "demands for increased wages or reduction of hours must be submitted to the local council," after approval by the national union, and "under no consideration shall a union . . . be allowed to inaugurate strikes without the council's consent." Thus, not only is the council to exert a direct control over all trade movements of the affiliated unions, but local unions affiliated with the building-trades council are also prohibited from entering into any agreement with a contractors' or employers' association that "requires members of the affiliated unions to work with non-union men or forbids the sympathetic strike."

The building-trades council is accordingly becoming the leading power in local building-trades affairs, and the trend is toward even greater centralization of power. Employers, as a rule, have no objection to this development. In many cities the stability of industrial relations is often dependent on the degree of unity in the ranks of labor and on the ability of the building-trades council to control the separate unions in regard to disputes both among themselves and with employers. Agreements "underwritten" by the council are less likely to be violated by either side. Instances where unions do violate the council's mandates are not infrequent, but are becoming so.

2. National Coöperation — Craft Industrialism

(a) *National Building Trades Council.* Nationally, the unions retained their pure craft basis for a long time, with little coöperation among them. The idea of uniting the various national building-trades unions was suggested many years ago. In spite of his emphasis on craft unionism, Samuel Gompers saw the necessity of paralleling in the labor movement the

centralization that was taking place within industry generally. At the 1888 convention of the American Federation of Labor, President Gompers, in his annual report, recommended the development of an "organization based upon a grouping of workers employed in related trades or industries." [1] The committee to which the subject was referred reported favorably, and the Executive Council was instructed to devise a plan for the establishment of Industrial Divisions or Trade Sections and to submit it to the national and international unions for discussion. The project remained dormant, however, until 1897, when the National Building Trades Council was organized.[2]

The need for a national organization which should deal only with building-trades affairs was becoming especially urgent. The developments taking place after 1885 in methods of building construction increased the number and complexity of the problems facing the unions. As might be expected, most of these problems dealt with jurisdictional claims. The conventions of the American Federation of Labor, composed of unions in different fields of endeavor, little acquainted with the special technical problems of particular industries, were unable to legislate wisely with regard to these. The movement for a federation of the building trades was, therefore, based on a fundamental need for self-government by the building unions.

A short perusal of the history of the National Building Trades Council shows that the primary object of the Council was to settle jurisdictional disputes. In applying for membership, each national and local union was required to submit a detailed statement of its trade claims. In the event of a disagreement as to jurisdiction, the Council forbade the stopping of work.

> All differences between trades and disputes over questions of jurisdiction must be settled off the work, in the halls of the unions concerned, by committees representing the disputing crafts, or be referred to the Council for adjustment; and until such adjustment is effected the men engaged in the said dispute must continue work,

refraining from outward show of antagonism, and must avoid involving the employer in any way in any such matter, in which he has no interest nor is a party to, nor responsible for.[3]

The National Building Trades Council was structurally weak. It did not attempt to get the national unions to coöperate with it in its dealings with the constituent locals. It had no authority to interfere with the trade regulations of any local council unless these interfered with the jurisdiction of another council.[4] In the face of this almost complete local autonomy, the development of any consistent policy was impossible.

The biggest obstacle to the progress of the Council was the opposition of the national unions. According to prominent officials of the carpenters', bricklayers', granite cutters', and plumbers' unions, the power of a national union over local groups was greatly weakened when, having only one vote, the union was outvoted, at a convention of the National Building Trades Council, by local trades councils, each of which had also one vote apiece. In 1905, too late to prevent the launching of a rival federation, the Council granted the national trades unions voting power proportional to membership, while continuing to allow each local council only one vote.

The ultimate downfall of the National Building Trades Council was brought about by the American Federation of Labor. It disregarded overtures looking toward the federation of the Council with itself and then, at annual conventions, bitterly criticized the Council for not affiliating. In 1899 it adopted a resolution which, while conceding that local councils of the building trades were of great benefit to the unions, asserted in substance that the National Council had assumed an attitude of hostility and of rivalry towards existing organizations, going so far as to charter unions for the purpose of antagonizing these.[5] The Federation regarded the National Council as a dual organization performing functions similar to its own. In subsequent efforts to combat the National Building Trades

Council, President Gompers urged the national unions to form a building-trades section within the Federation.

(b) *The Structural Building Trades Alliance.* In 1903, those opposed to the National Building Trades Council organized the Structural Building Trades Alliance, composed of national unions in the building industry. At its first meeting the larger unions — plumbers, carpenters, ironworkers, painters, electrical workers, plasterers, bricklayers, engineers, and laborers — were present. The smaller unions hesitated to commit themselves. The Alliance again called attention to the need for special treatment of building-trades matters and to the inadequacy of the American Federation of Labor to control and advise on such questions. The particular problems referred to were jurisdictional disputes, which at this time were playing havoc with the internal affairs of the unions and with their relations with contractors and the general public.

Those who sponsored the new Alliance were interested not only in eliminating disputes caused by changes in technique and materials, but also in safeguarding their skill and monopoly by preventing the formation of new unions. "In our opinion, the natural heirs to building specialties and tributary trades," wrote the secretary of the Alliance,

> are those men of primary or basic trades, who are intended to be displaced by the employment of the specialty, but heretofore, by reason of a want of understanding between us, we have been unable to control these specialties, so that the members of our various unions are gradually disqualified and displaced by younger and less skilled mechanics. Acting in concert we can prevent further trade disintegration, if not claim these specialties that of right belong to us, as we feel that we have a right to do.[6]

The Alliance received a decided impetus when the Brotherhood of Carpenters and Joiners, by a large vote, decided to affiliate. President Gompers and the Federation were not hostile to the new organization. In an interview President Gompers said that the Alliance would "do much to clarify the

labor situation in this country. The building trades have had much trouble over jurisdictional disputes, and the idea is to get the skilled crafts together." However, in 1907 the Federation declared that, although the Alliance was not dual in nature, "still there was not the feeling between the building trades unions and the American Federation of Labor so essential to success." [7]

The history of the Alliance did not bear out the optimistic beliefs of its protagonists. It proved unable to cope with the same three problems which had weakened the National Building Trades Council — jurisdictional disputes, the question of its own relations with unaffiliated national unions and with local councils, and that of the relations between the latter and the national unions. It frequently happened that locals of the national unions were affiliated by the local alliances (building-trades councils); or that locals of affiliated unions were excluded or refused to join. Local alliances were impotent to carry out jurisdictional awards by which the local unions were loath to abide. The Structural Building Trades Alliance had difficulty therefore in enforcing its rules.

Membership in the Alliance had been limited to the basic trades, in order to avoid opposition on the part of these, which would probably have defeated the movement. About eight national unions which had not been allowed to join the Structural Building Trades Alliance united in opposing it. In his 1906 report President Kirby was ready to acknowledge that the Alliance had failed; numerous local alliances were in trouble or had seceded; there were conflicts with central labor unions of the American Federation of Labor; and jurisdictional disputes had become general.[8]

(c) *The Building Trades Department.* Two attempts, extending over a period of ten years, to unify the national unions in the building trades failed — largely because the separate organizations were unwilling to make the necessary sacrifice in power. The unions were still too suspicious of each other's

intentions and too much afraid lest the new organization infringe upon their rights. But the problems requiring coöperative solution were increasing in number. Vexing jurisdictional disputes already were severely taxing the adjustment machinery of the American Federation of Labor. The Federation decided to reëxamine its position before the 1907 convention. Committees composed of officials of the American Federation of Labor and the Structural Building Trades Alliance met in conference, for the purpose of reaching some understanding whereby a closer relationship might be developed between the Alliance and the Federation of Labor. At the 1907 convention of the latter organization, a report was made, and the following resolution was unanimously adopted:

> That a Department of the Building Trades of the American Federation of Labor be created; said Department to be chartered by the American Federation of Labor, and to be composed of bona-fide National and International Building Trades Organizations, duly chartered as such by the American Federation of Labor; and to be given autonomy over the building trades with authority to issue charters to local building trades; said Sections and central bodies to be affiliated with the American Federation of Labor to be composed of bona-fide local unions and recognized as such, in the building trades.[9]

The American Federation of Labor and the Structural Building Trades Alliance, acting jointly, called a conference of all national and international building-trades unions, for the purpose of replacing the Structural Building Trades Alliance by a new, unified, and inclusive group under the banner of the Federation.[10] Nineteen organizations were represented. President Gompers, in speaking of the early efforts made to bring the building trades together, indicated that these were launched "in a spirit that was, if not manifest, at least interpreted to bring a cleavage or division in the labor movement of our country." To prevent a recurrence of that situation, he pleaded that the new Department concede to the American

Federation of Labor "the leadership and hegemony of the labor movement," and so assure its own success.

With the very inception of the Building Trades Department began a struggle, between the numerically strong and numerically weak unions, for voting power. The committee reporting on the subject recommended the voting plan which operated in the conventions of the American Federation of Labor. Under this system, the control of the conventions of the Building Trades Department would have been centered in the large unions. The Brotherhood of Carpenters and Joiners would have had the right to cast 1620 out of a total of approximately 3780 votes, while the painters, the next largest affiliated union, could have cast 600. With the aid of one strong union like that of the painters, the carpenters could have controlled the Department.

The plan finally adopted limited each delegate to one vote. This gave the carpenters seven out of about fifty-seven votes, and the painters five. The Brotherhood felt that on the floor of the convention they were at the mercy of the smaller unions; that they were being taxed without receiving fair representation.

Membership in the Department was confined to national and international building-trades unions *affiliated with the American Federation of Labor and universally employed in the building industry*, either in erection, repair, or alteration. Thus no organization that had seceded from the American Federation of Labor or had been expelled or suspended by it, or by any national or international body connected with it, *nor any local that refused to join the national or international union of its trade* was granted recognition or allowed representation, nor was any organization not in good standing with the American Federation of Labor allowed representation. The convention, refusing to repeat the error of the National Building Trades Council, turned down a proposal to give each local and state council one delegate and one vote.

The composition and authority of local councils presented a knotty problem. The agreement finally reached provided that local unions of affiliated trades were to join local building-trades councils chartered by the Building Trades Department and to form such councils where none existed. Full autonomy was granted to these as long as they conformed to the "laws of the Department." President Gompers feared that a clause permitting the chartering of state councils would create rivals to the state federations of labor chartered by the American Federation of Labor.

In regard to jurisdictional claims the constitution of the Department was specific. Each organization was required to submit a written statement covering the extent and character of its trade jurisdiction, and to send a copy of this statement to each national union belonging to the Department. Should a conflict over jurisdiction occur, the parties were to hold a joint conference within ninety days and endeavor to adjust the differences. If no adjustment was reached, the disputed points were to be referred to the next convention of the Department for decision. The award then made was to be binding upon all affiliated organizations. The salient weakness, as we have seen elsewhere, rested in the fact that no method of enforcing the award was mentioned.

How significant a part in the activities of the Department was played by jurisdictional disputes has already been indicated. The devices adopted — (1) settlement by conference, (2) intervention by the executive board of the Department if the conference failed, and (3) final decision by the convention — were not generally successful. Conferences were ineffective because the disputants were not evenly matched. A proposal in 1912 that kindred trades be consolidated met with the same opposition as before.[11] Enlarging the executive committee in 1913 in order to secure more general support for its decisions was equally fruitless. The unions refused to use force in compelling local bodies to comply with the awards of the Depart-

ment.[12] On the contrary, they made an effort to limit the Department's activities in jurisdictional disputes to cases where both international organizations involved asked for aid and agreed to abide by the ruling.[13] Finally, stoppages were prohibited on the work of interstate contractors until the disputes in question were submitted to the presidents of the international unions involved and of the Department.[14] The War prevented a reasonable trial of this remedy, and after the armistice the National Board for Jurisdictional Awards was established.

The Department proved itself most effective in eliminating dual unions. It was instrumental in uniting the warring factions in the Electrical Workers' Union. Likewise a dual union of stonecutters was driven from the field. The Amalgamated Society was united with the Brotherhood of Carpenters, and in 1915 the Brotherhood of Cement Workers ceded part of its jurisdiction to the Operative Plasterers' Union. The paperhangers and art-glass workers were merged with the Brotherhood of Painters and Decorators; the Marble Workers' and Tile Layers' International Union was consolidated with the Bricklayers'; and the composition roofers joined with the United Slate and Tile Roofers. The Plumbers and Steamfitters had already been amalgamated through the influence of the American Federation of Labor. The number of local dual unions was also measurably reduced.

The Building Trades Department increased its membership faster than did the American Federation of Labor. In 1909, the first year for which statistics are available, the nineteen affiliated national unions had 378,589 members. In 1926 the sixteen affiliated unions reported a membership of 574,497, and the Brotherhood of Carpenters, numbering 376,400, would have brought the total up to more than 950,000. At the present time the membership of the Department has passed the million mark. The number of local councils increased from 71 in 1908 to 372 in 1926. Eight state councils have been established.

The Bricklayers', Masons' and Plasterers' International Union was the last of all the national unions to affiliate, which it did in 1916.[15]

The primary difficulty with which the Department had to contend was the preponderant strength of the Brotherhood of Carpenters, who for a long time made up 40 per cent of its membership. The remaining 60 per cent was divided among seventeen or eighteen other organizations. In 1910, for instance, the carpenters had 183,712 members, while the painters, then the second largest organization, had 63,000; and the membership of no other organization affiliated with the Department exceeded 16,000. Friction was inevitable. The affiliation of the bricklayers in 1916 and the great increase in the membership of the electrical workers created a slightly better balance.

The jurisdictional claims of the carpenters' union created friction with many of the other unions affiliated with the Department. In consequence, these claims were not supported by the other unions, and membership in the Department was of small benefit to the Brotherhood. Up to 1914, they complained, they supplied from one-third to one-half of the revenue of the Department, while casting only one-eighth of the votes. For these reasons they refused to countenance compulsory measures of enforcing jurisdictional awards. In this refusal they were supported by the official policy of the American Federation of Labor.[16]

To measure the influence of the carpenters in the affairs of the Federation and the Department, one need only observe the effort made to placate them. When, in 1913, they withdrew from the Building Trades Department for the second time, President Gompers asked on what terms they would reaffiliate. The Brotherhood stipulated that the Federation should (1) settle the question of hollow metal trim; (2) give them protection through better representation nationally and locally; (3) cease compelling local unions to join building-trades

councils; (4) remove ineligible organizations from the Department; (5) have the Department return to its former method of electing an executive council of seven members.[17]

To what extent were these stipulations met? The controversy over metal trim was referred to a conference of nine persons, six appointed by the contestants and three by President Gompers. The second demand was satisfied by amending the rules to provide that organizations in the Building Trades Department having seven or more delegates (only the Brotherhood had so many) should have two votes for each delegate. The executive council was restored to its former size. At the next Department convention, the charter of the machinists' union, that of the boilermakers and that of the iron-shipbuilders and helpers were revoked, as requested in the fourth demand.[18] Finally, at the 1927 convention of the Department, was recorded the greatest political victory of the carpenters, when the National Board for Jurisdictional Awards was repudiated.

In 1923 President John Donlin summed up in one sentence the whole history of the Department: "Lack of concern and lack of authority make this Department ineffective." Although it failed to bring peace, it cannot, in the last analysis, be gainsaid that the Department served to promote better understanding and furnished a medium through which the problems of the industry could be worked out. Its outstanding achievement was the creation of the National Board for Jurisdictional Awards. Locally, it did much to secure a better federation of building-trades workers. Nationally, it fostered a broader approach to the problems in the industry, trying to inculcate a point of view which would raise its leaders above the narrow craft selfishness inevitable when they were absorbed in everyday affairs. It was the first group of building-trades workers to recognize the interest of the public in industrial relations, and many of its policies, particularly in connection with jurisdictional difficulties, were intended to reduce the hazards to which this third party to industrial disputes

is exposed. Before the Building Trades Department can function successfully, however, a solution for jurisdictional dissension must be found. No satisfactory solution is at present in sight.

3. Amalgamation — Industrial Unionism

The federation is but one attempt to bring about greater harmony among related trades. The more numerous these trades are, the more difficult is the problem of maintaining peaceful relations. The craft form of organization is blamed for the difficulty of settling jurisdictional disputes. Since, in many cases, the classes of work claimed by different unions are identical, or, at least, the boundaries are difficult to determine, much trouble could be avoided if the number of claimants to the same class of work could be reduced.

Most of the national unions, as we have already seen, attempted to eliminate dual unions before they tried to improve working conditions. The method used by the carpenters to reduce the number of unions in the building industry was that of amalgamating or absorbing those unions whose jurisdictional claims overlapped with their own. The standard for determining jurisdictional claims came to be based on the kind of material used. In the claims of the plumbers against the steamfitters and in those of the bricklayers against the plasterers may be noticed a somewhat similar extension of jurisdiction.

The tendency is for the small union to disappear. In 1915 it was estimated that of the 133 national unions in the United States only 28 could be considered basic crafts in the sense that they differed as regards the skill of their members. Even of the true craft unions half have some external coöperative affiliation. The original craft organization remains the nucleus which absorbs related trades. The "outside" carpenters, for example, was the basic group in that trade in 1881. This basic union has since absorbed the unions of cabinetmakers, carpenters working in mills, furniture workers, box makers, pile

drivers, dock workers, and metal trim carpenters. The National Union of Bricklayers in 1865 asserted jurisdiction over "bricklaying." Since then, in line with industrial developments, it has acquired control over stonemasonry, marble masonry, artificial stonemasonry, marble setting, tile laying, and, in many localities, plastering. The indications are that jurisdiction of unions according to product rather than according to process or subprocess will be extended. The unions mentioned and others which have gone through the same process illustrate the "typical way in which American unionism has responded to the necessity of industrial organizations in opposition to mechanization, the loss of protective skill, and the increased interdependence which are characteristic of modern industry." [19] The "Amalgamated" union is far in advance of the pure craft union both in its point of view and in its effectiveness.

The attitude of the American Federation of Labor toward the amalgamation of related trades has been more favorable since 1905. The need for such amalgamation was recognized in 1897 by the federation movement. In the Structural Building Trades Alliance in 1903 a specific declaration was made that related trades should be amalgamated and tributary trades be controlled by the basic unions. The American Federation of Labor recognized this tendency by chartering the Building Trades Department in 1908. Since then, the separate unions have themselves promoted the movement.

An important step was taken in this direction at the 1913 convention of the Building Trades Department. A resolution instructed the executive council of the Department to hold a series of conferences with the American Federation of Labor and affiliated international unions for the purpose of merging kindred international unions into several divisions or groups.[20] Although the letter of this resolution was carried out, in that conferences were held, the executive council reported to the 1914 convention that the actual process of making such groupings must be voluntary and not coercive. A union must not

"be compelled to surrender its rights and privileges as an international organization, and intimidated into compulsory amalgamation with a kindred organization of overpowering strength."

The primary advantage of amalgamation lies in the elimination of jurisdictional disputes. If related trades were united in one union, division of work would be simplified. If a dispute arose it could be more effectively settled by the organization to which both trades belonged. In England the stonemasons and granite cutters are federated in the same union, and there is no controversy between them. To be sure, the masons and bricklayers in this country, both members of the same international union, and the plumbers and steam fitters, also members of the same union, have had numerous disputes, but it is a much simpler problem to establish harmony when both groups are members of the same national organization.

But a program of amalgamation has many limitations. Probably the most important are the inertia of the leadership and the emphatic disapproval by small unions. We have already observed the obstinacy with which the latter defend their claims against their powerful antagonists. Related crafts, while they may have many interests in common, may have others which diverge widely, or directly conflict. Such conflicts are intensified if the parties amalgamated are not of equal strength.

Experience in building-trades unions in European cities exemplifies this difficulty. In Germany, for instance, the building unions in some cities are under one head, and the conflict there between the numerically strong carpenters and the numerically weak painters and others precipitates constant turmoil and factionalism.[21] In this country, the United Association of Steamfitters, a part of the Plumbers' and Steam Fitters' Union, is outnumbered by the plumbers, and claims that at local and national meetings it often is not given an opportunity to discuss matters affecting its own trades; that when given such opportunity it is outvoted by the plumbers' union; that most of the

funds are expended on behalf of the plumbers; and that most of the legislation is favorable to that trade.[22] The strong opposition of the smaller unions to granting the Brotherhood of Carpenters proportional voting power in the conventions of the Building Trades Department arises out of the fear of domination.

As a result, strong craft industrialism has not developed in the building industry. The Building Trades Department, which was supposed to be a compromise between pure craft unionism and industrial unionism, has not much control over the affiliated organizations. It is powerless to initiate policies and settle disputes. Its effectiveness might be increased if the number of unions were materially reduced — if the smaller organizations were assimilated and the Department composed of several large semi-industrial unions. Before such a program can be consummated, however, there must be a more liberal attitude toward amalgamation. The prospect of this seems at present very remote.

The smaller unions are definitely opposed to any amalgamation program, and their opposition is sufficiently powerful to block any effort in favor of it. At the same time, the larger unions have steadfastly opposed any increase in the powers of the Building Trades Department. That is, they are definitely committed to the principle of craft autonomy. Centralization is beneficial if it does not go too far. In spite of much evidence of breaking down of craft lines, particularly in the case of the carpentry and the bricklaying trades, there is little indication that this process will be carried out to completion. The most effective opposition comes from trade-union leaders who are of a conservative temper, and dislike losing their personal power and jobs. They often regard a program of amalgamation as some political dogma hatched up by radicals. Their strength is based upon the craft habit of the workers and upon the unwillingness of the latter to lose their distinctive craftsmanship.

CHAPTER XII

COLLECTIVE BARGAINING IN THE NEW YORK BUILDING TRADES

NEW YORK CITY is the most important building center in the country. For the past five years the average annual building program there has been approximately one billion dollars, nearly 20 per cent of the total for the entire country. More than 150,000 workers are employed in the erection and repair of buildings in that city. The organization of labor and employers is probably more thorough than in most other large cities. Moreover, only in New York have the employers been able to maintain an organization continuously for more than twenty-five years. The unions being recognized, the issues between them and the employers' association are not those of closed shop, open shop or collective bargaining, but rather questions of procedure and method; such as jurisdictional disputes, rules for job control, arbitration, wages and efficiency. As a result, an arbitration system of unique effectiveness has developed.

1. Early History

The building-trades unions in New York City played an active rôle in the early history of the American labor movement. The story of their organization, working conditions, economic and political program has been told elsewhere.[1] While some of the unions originated in 1850, their fortunes were affected by the vicissitudes of business conditions during the next thirty years. Until 1880 unionism was far from being a stable, permanent force in building affairs. The revival in business conditions after that date and the growth in the New York building industry which followed produced the conditions out of which the present union structure and policies have developed.

In several trades eight-hour strikes were won, and the unions were able to bargain collectively as to wages, hours and working conditions.

The principle of arbitration was first effectively recognized by the Master Masons' Association. A joint agreement made with the bricklayers' union on April 1, 1885, as the result of a four months' strike in the preceding year, provided that all disputes should be arbitrated.[2] The only question regarded by the union as not "a fit subject for arbitration" was that of jurisdictional disputes. Cordial relations continued for many years. The bricklayers did not join the central organization maintained by the building-trades unions until 1902, and then did so only upon the assurance that their agreement with the Mason Builders' Association would not be disturbed.[3] This early use of arbitration in labor disputes had a significant influence on the subsequent history of union-employer relations in the New York building industry.

2. The Movement for Local Federation

The increase in the number and power of the unions emphasized the necessity for joint action. In an effort to reduce friction among themselves and increase their effectiveness in dealing with their employers, six unions organized the Board of Delegates in 1884. By 1890, all the building-trades unions except the bricklayers were affiliated. Four years later, factional disputes split the organization, one faction joining a newly organized group, the Building Trades Council, the other remaining with the Board of Delegates. For six years these two hostile boards claimed the same field of action. In the fall of 1901 efforts were made to bring the factions together and in March, 1902, the United Board of Building Trades took the place of the two earlier boards. The twenty-two skilled trades and fifteen unskilled trades so affiliated could now have "harmony and unity of action." The primary object of the organization was to settle jurisdictional disputes and perfect the machinery for

the sympathetic strike, which soon became the most effective method of securing union demands.

3. Employers' Associations

For many years there was no central organization of building employers devoting its time primarily to labor questions. There were numerous associations of contractors in the different trades. The mason contractors organized in 1868 and reorganized in 1884. The carpenter contractors organized early in 1885. In 1891 there were five such associations and in 1901, seventeen.[4] A number of employers' organizations formed a central builders' exchange, but it was chiefly concerned with trade matters.

In 1889, in order to make arrangements for the New York convention of the National Association of Builders, a branch for social purposes, the Building Trades Club, was started. Two years later it was incorporated, and in 1901, maintaining membership in the national body, changed its name to the Building Trades Association. Any employer or workman in the building industry who had capital invested in his business was eligible to membership. Many of the more prominent employers were included. Among the objects of the club were "to encourage friendly and fraternal intercourse, to establish and maintain uniformity of action between those interested in the construction and erection of buildings and to reconcile and redress grievances among them." [5] At one time it made an effort to correct certain abuses in the labor situation but was not very successful in the attempt. As a mere social club it was unable, especially after the Building Trades Council became powerful, to deal effectively with the many problems confronting the industry.[6]

The Builders' League of New York, organized about 1894, was also important. Among about three hundred firms included in its membership in 1901 were fifty or sixty general contractors who controlled almost three-fourths of the large

construction projects in the city.[7] The League had no relations with the Building Trades Council or with any of the unions — this function was left to the individual trade associations. The employers were concerned primarily with business competition. Even by the aid of exclusive agreements with the unions, they were not able to bar outside contractors from entering the lucrative New York market.[8]

4. The Growing Tension after 1900

The unions, on the other hand, being thoroughly organized and banded together in a strong central body, could impose their demands upon the industry. The absence of annual agreements in many trades accentuated the uncertainty in wage scales. Numerous demands for higher wages, a large number of jurisdictional controversies, a greater emphasis on working rules, with the purpose of increasing union control over the job, especially by compelling the employment of union foremen and extending unionization to the building-material industries — the woodworking mills, in particular — involved the major trades in 1902 and produced unsettled conditions. Contractors complained less of strikes and interruptions of production than of the various rules enforced by the unions.

5. The Lockout of 1903

A sudden climax was brought about by two occurrences. The first was a jurisdictional strike of 10,000 carpenters against a rival organization. To aid the latter, the central organization of the building-trades unions declared a sympathetic strike against the carpenters. This strike, however, soon became unimportant. The Board of Delegates had admitted a small union of teamsters. Seeing an opportunity to unionize the whole industry quickly by controlling the delivery of materials, the Board demanded that all building supplies should be handled by this material handlers' union. The Hudson boat owners complied.[9] The Material Dealers' Association, how-

ever, closed the gates of every material yard in Manhattan, shutting down all building operations. Seventy thousand workers were affected. The Board was notified that the lockout would be lifted only when the union of unskilled material handlers was expelled. The employers, already organized in over thirty trade associations, broke all contracts with the unions and declared a lockout of all trades. One hundred thousand men were out of work. In four weeks the Board split; the twenty-two skilled trades seceded and organized the Building Trades Council.

At a special meeting held on May 15, 1903, the employers declared that the demands of the labor unions had become onerous, "that notwithstanding the great prosperity of all branches of the trade, the employer has been driven to a position where he was absolutely powerless in the direction of his business." One of the leaders of the movement declared that

> none of us want to see the labor unions exterminated or wiped out. We are not opposed to labor unions so long as they are fairly and justly managed. But of late the exactions of this union and of that union have become so oppressive that many of us honestly prefer to close our shops and retire from business rather than continue as we have been doing.

It was determined by a unanimous vote to unite and "stand for the right of the employer to manage his own business."

(a) *Strengthening of Employers' Organizations.* The meeting resolved to provide ways and means for the creation of a central body of employers.[10] On May 26, 1903, the Building Trades Employers' Association was formed. It was delegated the power "generally to determine, regulate and control the conduct of the members of this association and the trade associations represented on the Board of Governors in all matters pertaining to their relations with their employes." Each trade association preserved its autonomy in matters pertaining solely to its trade. Preceding central organizations were composed of contractors who joined individually irrespective of the trade

association with which they were affiliated; the Building Trades Employers' Association was a federation of trade associations whose members could also join as individuals.

To enforce discipline, members were bonded with a surety company for amounts ranging from $500 to $2500. Moreover, a member could not "resign during a suspension of business" and the bond was made payable upon the formal request of the Board of Governors. To cement the interests of the members and to make membership in the association profitable, the constitution "strongly urged" general contractors to subcontract all their work to members of the Association. These provisions equipped the Association with means to enforce compulsory membership — the closed shop.

Lest a wrong impression be given, the new Association made its stand on unionism clear.

> We stand for unionism in this city, because without it, it is a physical impossibility to attract the skill we need. It is not proposed to make a fight against union labor as such. In such a struggle the logic of the facts would be against the employers. In a contest on that issue the employers would be beaten. The use of nothing but union labor in the skilled branches of the work is dangerous to the employers, only in case they are weak and cannot make an effective protest against unreasonable demands. If on the contrary, they are strong enough to make their own interests good in any controversy with their employes it is an advantage to have a comparatively responsible union with which to negotiate.

Both sides must be organized, for only then can there be "respect tinged with apprehension." Weakness of either side leads to excess on the part of the stronger.[11]

(b) *The Establishment of the Arbitration Plan.* The new employers' association adopted a plan of arbitration. For some time before 1903, trade journals, prominent contractors and architects had been insistently agitating for the adoption of arbitration in the building industry. It was already successful in several trades, among them the masons' and plasterers'. The plan of the Building Trades Employers' Association was

designed to achieve three aims; to abolish sympathetic strikes, to eliminate jurisdictional disputes and to reduce the powers of the "walking delegate" or business agent. The plan was submitted direct to the skilled unions instead of to the Board of Delegates, against whom the attack was directed.[12] In most cases, the unions ignored the request, which they regarded as an ultimatum. Some unions refused to read the plan at the meetings, explaining that it did not bear the union label. Others refused to consider it unless the lockout, which violated a number of existing agreements, was first lifted.

After the deadlock had lasted for three weeks, the New York Civic Federation interceded and a joint conference was held. Within a few weeks, two-thirds of the unions accepted the arbitration plan and returned to work. The opposition to the plan came from the unskilled trades led by Sam Parks of the Ironworkers' Union, but several of the skilled unions also delayed their acceptance. Negotiations were carried on with those who did not sign the plan; and where these failed, dual unions were formed, upon the consent of the signatory unions to work with the new organizations. By November, 1903, all but one or two unions had signed, and the General Arbitration Board was organized.

The lockout incidentally had settled two important jurisdictional controversies. By signing the agreement first, the Brotherhood Carpenters permantly barred the Amalgamated Carpenters from the New York market. In the painters' trade, a local organization known as the Amalgamated Painters attempted to outlaw the Brotherhood Painters, the national union seeking to enter the New York market, by accepting the arbitration plan before the Brotherhood did. But the latter had an exclusive agreement with the employers and was admitted on the ground that existing agreements were recognized by the Arbitration Board. This marked the decline of the Amalgamated Painters.[13]

As originally conceived by the employers, the General Arbitration Board was a panel from which arbitrators were to be selected. It contained approximately one hundred and twenty men. Each employers' association had two representatives and each union recognized as a party to the plan had two, business agents being ineligible for the position of representative. A strike or lockout before a dispute was settled by the Arbitration Board was prohibited.

The plan sought to have all questions affecting each trade decided by an arbitration board on which unions and employers in that particular trade were equally represented. Failure to agree upon an umpire or failure to abide by the decision of a trade board automatically placed the dispute in the hands of the General Arbitration Board. From its members were chosen special boards which bore the brunt of the arbitration work. Each special board had at least four members and contained both union men and employers. Between regular meetings of the General Arbitration Board an executive committee composed of six employers and six union men was vested with power to act as a board of conciliation, as well as with the other powers of the General Board. Through this executive committee the Arbitration Board gradually became a joint conciliation body for the building industry, endeavoring to settle disputes without resort to arbitration.

The arbitration plan stipulated that there should be a closed shop in all trades. Only in an emergency could the Board of Arbitration order union men to work with nonunion men. If nonunion workers were employed without authority, and if, upon order of the Arbitration Board, they were not discharged within twenty-four hours, the union was permitted to strike against the contractor. This also protected contractors who were members of the Building Trades Employers' Association against being underbidden by outsiders employing union men at lower than union wages. As far as the contractors who were members of the employers' association were concerned, the

business agents had no power to order strikes, but were mere executive officers of the unions. They retained their power, however, in dealing with contractors not members of the employers' associations. The closed shop therefore stabilized competitive conditions and tended to force outside contractors to join the association.

Although the arbitration agreement was enforced only where the unions had economic power, it was a victory for them in so far as it gave them the recognition which previously had only been implied. On the other hand, that the Building Trades Association was able to "put the plan over," in face of much opposition on the part of the smaller unions and many of the business agents, was an indication of the new power which joint action in handling labor problems gave the employers. The unions learned that the Association was prepared to fight to share control with them and bring about fair conditions in the building industry. The arbitration plan created an *esprit de corps* among the builders in New York. Nowhere else have the employers remained as well organized and in as complete control of the situation as there.

(c) *Underlying Causes of the 1903 Lockout.* The basic causes of the 1903 struggle were more than the impositions of the unions or the employers' desire to rid the industry of union control. The inherent difficulties of the industry had come to the surface and needed drastic treatment. This view was voiced by the *Record and Guide*, an important building-trades journal in the East. It wrote, editorially:

> What the public hears in the 1903 controversy about arbitration, open shop, liberty to work, ten commandments, and golden rule is all surface talk. Revelations of graft are not isolated cases. Parks was an example, but corruption was deep seated and permeated the trades. The evil is fundamental. The public is beginning to inquire how far the organization of the employers' association was the effect of internal abuses and of illicit disunion among the employers. The Association was necessary not only against the demands of labor but also against the lax code of the building trades. In the course of the

connection between labor and the employers each had used and misused the other to such a degree that self respect vanished. For years the employers in New York city had been inclined to look upon the Manhattan market as a special possession of their own, a local domain. There was a general tendency toward exclusiveness throughout the entire building trades. The idea of "protection" was applied to a certain group of trades. The employers and labor had different points of view but a similar motive. This protection expressed itself in a gradually developed system of "interference." This weapon of interference whether it worked directly or indirectly, by connivance or inference, had for its main object the protection of the New York market. The owners of real estate in New York paid the bill. Labor was a partner and shared in the pie. Parks was at one time a straight fellow but he breathed a poisonous atmosphere in the employers' offices. The organization of the employers marks, in a general way, the point at which the loss came in for at least one of the parties. There was no longer enough in it for two. The employers had their protection but the unions made them pay for it. When the employers' association was created it was necessary not only to continue to protect the market but to protect against labor. Labor had lost the respect of the employers as a body. Open market and open shop was not desired but the employers wanted the unions to be less exacting.[14]

Theodore Starrett, president of the Thompson-Starrett Company, who was one of the leading building-trades employers in the country at that time, wrote:

Not so very long ago there was an understanding in connection with almost every large building of importance, especially the buildings for rich owners, whereby the employers in each line would divide up the work. There was usually a small coterie in each trade and there was plenty to go around. There were no cut prices, everything was easy and the architect, through whom the work had to be secured was made to believe that the only way to get the work done properly was to let it to some one of the "big four" or "big five" or "big six" as the case might be. Then came competition. . . . When strange employers and strange men came in it was necessary to squelch them. Treaties were made with the different trades, and strange to say, employers had to arrange to "take care" of their fellow employers . . . and by means of . . . treaties, any employer

who misbehaved was disciplined. Strikes were declared against the recalcitrant ones for no apparent reason at all, or, if the walking delegate, who was the instrument through whom these were done, condescended to give his reasons, it was for any reason that suited the moment. The employees discovered what a bonanza their employers had and took advantage of it. Books of the unions were closed and had been so for years, and the results were that in some of the trades the different employers virtually had to put their jobs on a waiting list at the union hall and when the men got through with one job they always knew of three or four others where they could go without the loss of any time. The principles of these combinations have been carried out as far as they would go in all trades. Times changed, but the men would not change with them, and it finally culminated in a war in which the New York employers want to win and do not want to win. They want to win the union and they want them to stay friendly. . . . It is simply a question of allowing union men from other cities to work in New York and also a question of allowing employers from other cities to do business in New York. This is the conspiracy in the New York building trades.[15]

6. Industrial Relations under the Arbitration Plan

The arbitration plan weathered several serious tests in the first two experimental years. The unions, accustomed to direct action, found the deliberative machinery of the Board too slow and unwieldy. Trouble began almost at once. Early in 1904, for example, the laborers struck, demanding to be included under the terms of the arbitration plan. The bricklayers struck in sympathy, the Mason Builders' Association having arbitrarily increased the hours of work of the laborers. The acts of both union and employers were contrary to the agreement. In April, 1904, the elevator constructors struck; in June, the plumbers; in August, the carpenters; and during the fall several other unions violated their pledges not to strike.

However, the Arbitration Board survived. Neither side was willing to overthrow the entire arrangement and arouse the organized power of the other.[16] Before the year 1904 was over the plan was established and receiving general recognition.

The employers' association was solidifying and the unions were accommodating themselves to the new arrangement. As distrust of the Board on the part of labor wore off, complaints were handled more expeditiously. The general outline of the agreement remained unchanged, even when the plan was revised in the following year at the desire of both unions and employers.

The expected unionization of the trades had not taken place. Numerous stoppages still occurred on the work of Association members. In order to expedite the making of decisions, significant changes were made in the arbitration machinery. The executive committee of the Arbitration Board was given power to act on all complaints before these were submitted to the full board. The basis of representation was altered to give each side an equal number of votes.

7. The Ironworkers

The ironworkers' union, always the stormy petrel in the New York building industry, continued to disturb the peace. Sam Parks, the leader, had been charged with most of the responsibility for the upheaval in 1903. Contending that the agreement of his own local union did not expire until 1905, he was the strongest opponent of the original arbitration plan. To compel acceptance of this, the ironworkers were locked out and a dual union recognized. The ironworkers would not admit the members of this dual union when a settlement was finally to be made. In 1904 Sam Parks' local was disbanded and four new locals were substituted. Peace reigned for a short while.

In 1905 the national ironworkers' union failed to renew its agreement with the American Bridge Company, a national iron-erecting concern, and struck against this company. In violation of the arbitration agreement, it ordered the New York locals to strike against the New York firm of Post and McCord, believed to be subsidiary to the American Bridge Company.

The Arbitration Board directed the ironworkers to resume work, pending an investigation, and when they refused to do so, expelled them.

Perceiving that the ironworkers were not to receive the support of the other New York unions, the National Erectors' Association seized upon this as an opportune time to inaugurate its open-shop policy.[17] As a result, it has had no collective bargaining with the ironworkers' union since 1906, although the union attempted in 1919, and again in 1924 with the help of the Building Trades Employers' Association and the Building Trades Council, to reëstablish the closed shop. The ironworkers have been able to maintain their organization with little loss of membership, but their prestige has been considerably reduced.

The reasons why this union was unable to regain its former power have been discussed elsewhere in greater detail. Its leaders, beginning with Sam Parks, had an unsavory reputation. The rank and file of building workers generally imputed to the ironworkers the responsibility for all the graft and violence in the building industry. A small group of well-organized employers, considerably ahead of the general run of subcontractors in ability and financial standing, strongly supported by the open-shop steel industry, controlled the iron-erecting business. To fight an organization so strongly entrenched as the National Erectors' Association appeared futile to the other building-trades unions. On only one occasion did they strike in sympathy with the ironworkers.

8. The Breakdown of the Arbitration Plan

The first large-scale experiment in industrial arbitration came to an end in 1910. In the summer of that year the steam fitters struck in violation of their agreement. When the other unions refused to join the employers in expelling the steam fitters from the Board, the Board adjourned *sine die*. The shortcomings of arbitration were becoming apparent; otherwise the machinery would have been reëstablished later. The

steam fitters' strike merely furnished a convenient excuse to adjourn the Board.

The causes of the general dissatisfaction with the operation of the plan were several. First, as adopted in 1903 and amended in 1905, the plan very carefully specified that unions could not be represented on the Arbitration Board by business agents. The purpose of this provision, inserted by the employers, was of course to disarm the despised "walking delegates," to whom all the ills of the industry were charged. It would not have been expedient to invite them to join in a reform movement which sought to reduce their power and prestige. The union representatives on the Arbitration Board, moreover, soon became worthy competitors for the office of business agent. Participation in the proceedings of the Board gave them contact with important personalities and made them conversant with union-employer politics and trade matters generally. The walking delegate, interested in hampering future rivals in union affairs, opposed the arbitration plan at every opportunity. The decisions of the Board were denounced; every opportunity to violate them was seized; and attempts to undermine its power and influence were quite open. Employers admit that if the business agent had not been barred the Arbitration Board could have survived a severer storm than that of 1910.

Second, the original purpose of the plan was soon lost in a maze of union and employer politics. Instead of an arbitration tribunal the Board became a legislative body, each side representing definite political alignments. Thus in deciding jurisdictional disputes the unions and employers often split into two distinct groups, forgetting the merits of the question. Employers charged that union representatives often met in caucus before a Board meeting and so prejudged many questions.[18]

Third, a contractor could not adequately attend both to his business and to the Arbitration Board. As one employer said, "We have been arbitrated to death." It was not unusual for a contractor to be at the offices of the Arbitration Board until

midnight two or three nights each week, as a complainant or defendant, or as a witness for other employers or for the union. To be subjected to all the red tape and politics involved in this parliamentary procedure was too much of a strain.

Fourth, there was no small amount of opposition from the local and national unions. Some felt that the plan had been imposed upon the unions in 1903, at a time when their forces were split. Many of the national unions never favored the New York arrangement, looking upon it as an indication of the employers' mastery. The Building Trades Council as the central body of labor had no representation on the Arbitration Board, as had the central organization of employers.[19] The Board of Governors of this organization, the union leaders charged, was the ruling body in the New York building trades; not the Arbitration Board. A decision of the latter was enforced if it was accepted by the Board of Governors; otherwise, the union was locked out and threatened with the formation of a dual union, the employers disregarding the decisions of the Arbitration Board. From the very inception of the plan a feeling prevailed that it tended to disrupt the unions and increase dissension among the building-trades workers.[20]

The national officials blamed the arbitration plan for the "localism" of the New York unions, which disregarded national decisions on questions of jurisdiction and so upset the program for a uniform policy. So powerful were the localistic tendencies of the New York unions, tendencies fostered by the employers, that when the Building Trades Department was organized, it debated for some time whether the New York Building Trades Council should be given a charter. Although the national unions did exert some influence on certain locals, their control was relatively weak. One national union official characterized the situation when he said:

> There are a number of trades there . . . if the national union came to them and told them that it was for the best interest of the whole organization that the local break their agreement with the employers,

the union would rather choose to be a local and stake on their agreement with their employers against the national unions.[21]

Many of the important unions, such as the carpenters, ironworkers and bricklayers, were at one time or another expelled from their national organizations because they subscribed to local practices and arrangements counter to national rules.

Fifth, the delays in settling complaints caused a strong undercurrent of opposition. The executive committee frequently came to a deadlock. Inability to decide upon an umpire often caused additional delay. It was felt that when an umpire not a member of the industry was chosen he frequently failed to understand the technical questions that came up. Lawyers were disqualified to act as umpires. It was often difficult to find anyone sufficiently conversant with the nature of the dispute to be able to render a decision. Unions and employers soon agreed that they would rather take a chance of an umpire's being prejudiced than on his not being able, and that it was therefore better to select a man familiar with the building industry.[22]

The disruption of the arbitration plan broke the contact between the unions. The bricklayers in particular had not been affiliated with the Building Trades Council since 1902, and did not rejoin the Council when the Board adjourned. Thus they lost the only official contact which they had had with the other unions.

The fact that the arbitration plan finally ceased to operate was by no means an indication that it had failed. The most beneficial result of the seven years of arbitration was that there had been established a large number of decisions on jurisdictional questions, which later served as precedents to govern the building industry. Since jurisdictional disputes were the most serious threats against peace, the willingness of all groups to accept these decisions stabilized the situation somewhat when the Board adjourned.

9. Industrial Relations after 1910

Upon the breakdown of the arbitration plan the Building Trades Council declared its willingness to obey all previous decisions of the Board. The Building Trades Employers' Association resolved to "deal with unions in the building trades only so long as labor disputes are adjusted by conference and arbitration, and will not tolerate strikes of any kind against members of this association." Since 1910 all agreements in the New York building industry have contained the following clause:

> It is mutually agreed between the parties hereto that the fundamental principles as set forth in the Joint Arbitration Plan of the New York building trades, as adopted on July 9, 1903, and amended on April 22, 1905 and all decisions rendered thereunder, shall be recognized by and be binding upon the parties hereto.

It will be remembered that the General Arbitration Board had been superimposed upon the separate trade boards. It functioned only if the trade agreement failed to keep peace, or if the issue was outside the province of the trade agreement. The adjournment of the Board did not disrupt the contractual relations between the unions and the employers in the separate trade associations. Ordinary questions of wages, hours, working conditions and trade matters were left to be decided by the trade agreement in each of the thirty-three trades which were already organized. But questions affecting jurisdictional disputes between one union and another and questions on which the trade boards could not reach a decision were referred, after 1910, to the Building Trades Employers' Association, and decided by its executive committee of twelve employers. If the committee failed to reach an agreement, it called in an arbitrator.[23]

The procedure was novel. Never before in the history of the building trades had a committee composed exclusively of employers been permitted by the unions to decide jurisdictional

questions. Awards were based on evidence as to who was "in possession of the work" at the time of the dispute. This was relatively simple to ascertain, and the unions held that the employers could pass upon the evidence more fairly than could the workers' organization. When neither union could prove possession, neither was given exclusive claim to the work; the employer could award this to either union and the other was not permitted to strike. It might, however, later present new evidence in proof of possession. Once the decision was given, it was final and not subject to appeal. At times the decisions conflicted with those of the Building Trades Department and national unions which, therefore, found great difficulty with this system of arbitration.[24] It appeared to be satisfactory, however, to the New York building-trades unions.

(a) *Wage Strikes.* At no time have fundamental questions been contested in the New York industry, or has "unionism" been made an issue. Local jurisdictional disputes became a minor cause for stoppages after 1910, but wage demands became more important. They were not generally disputed if conditions in the New York market permitted the employers to shift the increase to the consumer. However, if one craft was granted a wage increase the differentials in the other trades were disturbed. Machinery to stabilize the level of wages broke down at crucial times. A uniform rate for all the skilled trades and another for the unskilled trades was enforced for several years, but this was objectionable to the employers.

From 1910 on, the business agents slowly regained power. The building boom which followed the Great War strengthened the Building Trades Council, reorganized under the leadership of Robert P. Brindell. Through his influence, early in 1920, following a wage strike, a collective agreement was signed between the Council and the employers' association, which included sweeping provisions for arbitration.[25] Not only were wage increases conceded to most of the trades and a wage scale (subject to change with the cost of living) established for two

years, but a clause in the new agreement permitted the reopening of the wage question on five months' notice. A new Arbitration Board was established, consisting of five members of the executive committee of the employers' association and five members of the Building Trades Council "to whom shall be referred all disputes that may arise relative to all alleged violations of this agreement or the intent and meaning of any part thereof." In case the Board could not agree, provision was made for the choice of an umpire, whose decision was to be final and binding.

The employers agreed that as long as the unions enforced the agreement they themselves would employ union men exclusively; and the unions agreed that they would furnish at all times sufficient workers to man the jobs of association members. This latter provision frequently necessitated calling men off the jobs of independent contractors. Moreover, it precipitated a fight between the Iron League and the other members of the employers' association. The iron employers had not entered into any contractual arrangement with the ironworkers' union since 1906, and, rather than reverse their open-shop policy, they severed relations with the general employers' association.[26]

(b) *The "Twelve Principles."* The agreement made in 1920 expired on December 31 of the following year and was not renewed. The employers charged that "during the terms of the agreement of 1920 and 1921 the favors of the Council were frequently sold to contractors not parties to the agreement."[27] The uniform agreement with horizontal wage scale which had been granted to Brindell was now objectionable to the Building Trades Employers' Association. If the association assumed the right to negotiate wages with the Building Trades Council, it was argued, it would take away from the contractors their only reason for an interest in the separate trade associations, and so would decrease the degree of organization among them.[28]

Agreements between the separate unions and the trade associations were not made, however.

Meanwhile the Lockwood Committee had been conducting its investigation. Through its influence, the Building Trades Employers' Association, in January, 1922, directed its affiliated associations to negotiate agreements embodying the "fourteen principles" it had adopted, "upon which Agreements should be Based." The Building Trades Council forbade the unions to sign such agreements and, in spite of the intervention of a committee of citizens, would not confer with the employers on the basis of the "fourteen principles." Not until October, 1922 were the two groups able to agree. They evolved "twelve principles" and a method of procedure which is still used.

PRINCIPLES UPON WHICH TRADE AGREEMENTS SHOULD BE BASED

1. There shall be no strikes or lockouts or stoppages of work, neither shall members of a union collectively leave the work of a member of the Building Trades Employers' Association. Trade agreements made by the employers' associations, members of the Building Trades Employers' Association, and trade unions shall provide that all disputes arising in the trade shall be settled by trade boards of arbitration, with an umpire if necessary, and the decisions of trade boards and umpire shall be final and binding.

2. There shall be no agreement providing for discrimination against building materials, raw or manufactured.

3. The amount of work a man may perform shall not be restricted by a union nor by the representatives, officers or members of a union; and the use of machinery, tools, appliances or methods shall not be restricted or interfered with.

4. The employers shall be at liberty to employ and discharge whomsoever they see fit; and the members of the unions shall be at liberty to work for whomsoever they shall see fit.

5. The foreman shall be the agent of the employer and shall not be tried for any of his acts as foreman without due notice of the trial, accompanied by a written statement of the charges against him, being given to the Joint Trade Board.

6. The trade associations and unions shall jointly maintain a system of apprenticeship training which will provide an adequate force of skilled mechanics. The Apprenticeship Plan of the New York Building Congress is endorsed.

7. The members of the unions shall not refuse to work with men who are not members of their organization when the unions have failed to supply a sufficient number of mechanics.

8. Overtime shall not be worked except when unavoidable.

9. There shall be no provision, in any trade agreement, having for its object the collection of debts.

10. There shall be no provision, in any trade agreement, which will prevent the doing of cutting by the trade which installs the work for which the cutting is done.

11. Unskilled work, as defined in the trade agreements, may be performed by laborers or helpers. The work that has heretofore been recognized to be in the possession of a trade shall not be submitted to arbitration, unless possession is claimed by a party or parties to a jurisdiction of trade dispute.

12. All trade agreements shall provide that disputes between trades and disputes relative to questions of jurisdiction shall be adjusted in accordance with the method set forth in the Joint Arbitration Plan of the New York Building Trades as adopted on July 9th, 1903, and amended April 22nd, 1905, and that all decisions rendered thereunder determining disputes arising out of the conflicting jurisdictional claims of the various trades shall be recognized by and be binding upon the parties thereto.

(c) *Arbitration Tested.* Since the central arbitration board was reinstituted, no significant changes in adjustment machinery have occurred. "Boom" conditions increased the number of wage demands. So favorable were conditions to the unions in June, 1923 that the bricklayers, for years the advocates of arbitration, refused to arbitrate a wage dispute. In spite of strenuous opposition and the threat of an open-shop campaign, in one month they won an increase above the general wage level prevailing in the other trades. This strike illustrates a condition frequently found in the building trades. Of the 2000 strikers not one was idle. Private and operative builders were more than willing to pay the rate demanded. The limiting

factor at that time was lack of workers; it did not lie in wages.

The year 1924 was that in which the building industry came nearest to being 100 per cent at peace, if such a condition in that industry is conceivable. Wage agreements did not expire until January 1, 1925. In November, 1924 the Building Trades Council asked for another blanket agreement such as was given to Robert P. Brindell at the height of his power. The Employers' Association, in accordance with the provisions in the "twelve principles," referred the wage demands to the trade associations, which rejected them. The stability of the system of industrial relations developed in the New York building industry was shown by the fact that the question then automatically passed for mediation to the executive boards of the central employers' association and the Building Trades Council. If such mediation had failed, the entire matter would have gone to an arbitrator for final decision, pending which work would have proceeded as usual. The adjustment machinery was able to avoid direct action at a time when the industry needed peace.

Negotiations continued for almost three months after the old agreement expired. Perhaps the strongest argument for higher rates of payment was that the wages asked really amounted to the official wages then current, plus the bonuses which many contractors had been paying since 1923.[29] Some of the employers, however, had ceased to pay a bonus, which fact had prompted the movement on the part of the unions to have the additional payments incorporated into the wage scale. It would be far less simple to revise a wage scale officially established than it had been to discontinue a bonus as soon as industrial conditions permitted. Both sides appreciated this.

The daily and yearly earnings of the New York building-trades workers were higher, the employers contended, than those of workers in any other industry in the city. The average annual number of working days in five years for outside men

had been 228½, and for inside men, 280, according to the figures of the employers.[30] They argued that neither contractors' profits nor employes' efficiency had increased sufficiently since the war to justify the demands for wage increases. These ranged from one dollar a day for mechanics' helpers to four dollars a day for bricklayers. The unions maintained that the higher rates of pay were warranted by the demand for building-trades labor. It was unfair, they said, to compare the yearly earnings of the building-trades workers in 1925 with those prevailing during the depression in 1914 when there were nearly two men for every job.

A new scale increasing wages from 11 to 16 per cent was agreed upon on March 23, 1925. This upward revision of the scale meant an addition of from fifty to seventy-five million dollars to the yearly wage bill of more than five hundred million. Employers justified the increase on the ground that the industry could afford it if continued production could thus be assured. A strike would have cost many millions more than the amount of the additional wage payments.

10. Producers versus Consumers

When the Lockwood Committee sought an explanation for the general depression in building and the high cost of construction prevailing in 1921, it discovered "from structural steel and bricks to doorknobs and sandpaper, every article entering into building construction . . . to be under the control of merciless, gouging, monopolistic combines." [31] While this situation was in part produced by post-war conditions, there were especially obnoxious combinations among producers in this industry, seeking to tie up the market in favor of a particular group. This review of industrial relations in the New York building trades would be incomplete without some mention of occasional shortcomings in the collective bargaining arrangements. These arose from the opportunity to make exclusive

agreements and to enforce various practices which retarded competition.

The methods by which competition was restricted have been treated in another chapter. It is sufficient here to note that in New York City collective agreements have at times reacted against the public interest. Contractors from other communities have had difficulty in securing labor in New York City even though they were willing to live up to "New York conditions." Contractors not members of the trade associations affiliated with the Building Trades Employers' Association were more often subjected to labor disturbances than contractors who were so affiliated. This was one means of compelling contractors to join the central organization. The rule of the Building Trades Employers' Association that general contractors should let subcontracts only to members of the affiliated trade associations was also an effective restriction on competition.

It has repeatedly been asserted that members of the employers' association had understandings by which one would refuse to complete the job of another where the work had been unsatisfactory. Many strikes or walkouts occurred when a member of the contractors' association had not been paid for his work, the union thus making itself a collection agency for the contractor. These abuses, plus the frequent discovery of unethical practices on the part of trade-union leaders and contractors, illustrate how onerous anti-consumer combinations can become.

To emphasize these abuses, however, is to overlook the significant developments in the building industry of New York City. The organization of workers and employers succeeded in maintaining joint adjustment machinery for arbitration, and thus solved many issues peacefully. This brought the worst phases of the industry under control and laid the foundation for a code of industrial relations superior to any developed in other communities.

CHAPTER XIII

INDUSTRIAL CONFLICT IN CHICAGO

DURING a quarter of a century the unions and employers in the New York building trades built up a system of industrial relations which, although imperfect and permitting collusions, kept peace. In spite of occasional and often inevitable conflicts on wage questions, the building industry in that city has not, since 1903, been tied up by general strikes. There is a different situation in Chicago. All the bad features of industrial relations in New York are found to a greater degree in the mid-western city. Chicago, however, lacks the compensation of a system of labor relations that assures stability. There is no peace in Chicago; only truces of short duration during which guerilla warfare is just as popular as during the periods of war. The chairman of a state investigating commission describes the situation thus:

> Without hesitancy I say that the dishonest practices of business agents, contractors and material men fastened on Chicago a system of unparalleled iniquity that defies the local, state and federal laws, so powerful that the courts and prosecuting agencies of government have been powerless to protect the victims of this conspiracy.[1]

This condition is the outgrowth of collective bargaining which for twenty-five years has been unable to eliminate those practices and methods that give the industry an unsavory reputation. Not infrequently alliances between the union leaders and political organizations in Chicago perpetuated corruption and made the task of reform much more difficult. Fortunately, however, in more recent years the worst features which characterized the problem in this city have been brought under control: inter-union disputes have been largely reduced; dishonest practices on the part of business agents and contractors, while not entirely eliminated, have also been minimized; dis-

agreements which resulted in strikes and other disturbances have been reduced in number; and, more significantly, jointly controlled adjustment machinery provides an effective means of conciliating the differences which arise in the daily conduct of building operations. These improvements have been possible only because workers and employers were able to maintain their organizations intact. Abuses, and there were many, were most onerous and outstanding when either labor organizations or those of the employers were too weak to use disciplinary powers.

What has been responsible for these spectacular developments in the Chicago building industry? What peculiar local conditions added strength to the various factors which sought to control the problems existing in the industry? What has been the nature of the joint machinery for collective bargaining which has been established? What developments tended toward the elimination of those obstacles which stood in the way of more stable relations and more efficient conduct of the industry?

1. Union Organization before 1900

The struggle for control goes back to the middle of the last century. The stonecutters, plumbers and bricklayers had thriving locals during the fifties, which did not, however, survive the Civil War; and when the bricklayers reorganized soon after, they were again disrupted by the depression in 1873. The plasterers' union began its existence in 1864 but was also short-lived. The carpenters of Chicago had several locals before 1880 and more than twenty locals by 1887. A majority of these were affiliated with the United Brotherhood of Carpenters and Joiners; the others with the Knights of Labor or the Amalgamated Society of Carpenters.[2]

With the revival in building activities after 1875, the labor organizations in the industry increased in number and effectiveness. The bricklayers' unions were particularly active after

1880. The establishment of the first arbitration board in the Chicago building trades was the result of the bricklayers' strike in 1887.[3] The National Association of Builders had many members among Chicago mason contractors, and these introduced into the Chicago industry the principle of arbitration which the national association had developed. The organization of the national unions also stimulated the growth of the Chicago locals. The World's Fair in 1893 added to their strength and membership, and every building trade had a union in Chicago by the end of the century; between 75 and 90 per cent of the building workers there belonged to some craft union.

The Building Trades Council, a delegate body with control vested in several committees, was organized in 1890 — a most significant step toward increasing the effectiveness of the various unions. But the real power was in the Board of Business Agents, another organization composed of the elected business agents of the affiliated unions. Each business agent had the right to call strikes in his own trade without consultation, but a sympathetic strike had to have the sanction of the Board. This power to call or to veto strikes really gave the Board control over the Building Trades Council.

The leader of the Council and the dominating personality in the history of the Chicago building industry for nearly two decades was "Skinny" (Martin B.) Madden. His character and influence are described, by one who has studied his career, in the following words:

> To the public . . . he became a devil incarnate; he was the personification of graft, violence, and intimidation. Still a young man, possessed of a pleasing personality, uncanny in his methods of removing from the game anyone who happened to cross him, lacking any very penetrating grasp of the forces at work in American industrial life, indifferent to the need of permanent contractual relations, proud of the fact that "his word was as good as his bond," "Skinny" Madden dominated the building trades in a manner that no leader since has been able to emulate. To Madden's bizarre and short-sighted leadership can be attributed in part, the rapidity with which the unions became intoxicated with their own power.[4]

Few cared to incur his enmity. He came to the Council as a business agent of the Steam Fitters' Helpers' union, and soon became president, treasurer and business agent, all in one.

During all this development there was no permanent central organization of employers. There were some local trade associations, but these were no match for the Building Trades Council and the Board of Business Agents. Abuses characteristic of one-sided organization permeated most of the trades. The employers contributed to the corruption by making exclusive agreements which practically guaranteed a profitable monopoly of laborers to themselves and one of jobs to the unions. These, in return for higher wages, promised to work only for contractors who were members of the employers' associations. They maintained that such arrangements were necessary to protect the wage rate during periods of depression. The direct result of these agreements was to increase the membership of the employers' associations. The mason contractors, for example, who, for many years, had been organized and had conducted joint relations with the bricklayers' union, made an agreement with the latter which forced some 600 mason contractors to join the association.

Some unions, however, were not receiving the expected benefits. The carpenters, in particular, had difficulty in finding employment for all their members. As a result of this dissatisfaction the Building Trades Council, shortly before 1900, forbade individual unions to sign exclusive agreements and forced them to break those already signed. This action embittered many of the contractors against the Council and in part explained their opposition to its continued existence.

2. Employers' Organizations

In 1894 the contractors organized a building conference committee, but it functioned for only a short time. The employers were indifferent to central control and to questions of wages, hours and working conditions. Trade associations were more

interested in agreements controlling prices and restricting competition. They could always use material dealers against the unions, but the material dealers had also agreements with the unions protecting themselves against outside competition.

But changed economic conditions and the pressure of new demands soon forced the contractors to action. In April, 1889, as a "war measure," they organized a Building Contractors' Council resembling the Building Trades Council in all essential respects. It was given absolute power to take any action it saw fit — to order a lockout without a referendum vote of its members and to supervise the agreements into which these might enter. Any agreement permitting a sympathetic strike was prohibited.[5] William O'Brien, head of the Mason Contractors' Association, soon came to the fore in the new organization. He furnished it with the necessary leadership, and "to his indomitable will and influence, coupled with the loyalty of his cabinet, may be attributed the successful culmination of the great struggle in 1900." [6]

3. The Lockout of 1900

Many abuses needed correction, and the new Contractors' Council lost no time in beginning the contest. It had nothing to lose by defeat. The unions had never been defeated. On August 28, 1899, the contractors appointed a committee and requested that a similar committee from the Building Trades Council confer with theirs "to correct existing abuses and to arrange a plan whereby future strife may be avoided."

(a) *The Cardinal Principles.* The Building Trades Council showed no disposition to recognize the new employers' organization or to act on its demands. In November, therefore, the latter passed a series of resolutions stating that while it had no intention to question the principle of legitimate unionism or to alter existing wages or hours, it would not, after January, 1900, recognize the following:

1. Any restriction on the use of machinery.
2. Any restriction on the use of any manufactured article except prison-made goods.
3. Any limitation on the amount of work a man should perform during his working day.
4. The right of any person to interfere with the workmen during working hours.
5. The right of the unions to prohibit the employment of apprentices.
6. The sympathetic strike.

These six points, later expanded into eight, were known as the "Cardinal Principles." No notice was taken of them at first by the Building Trades Council. Later, under the leadership of Congressman Martin B. Madden — who must not, of course, be confused with Martin B. ("Skinny") Madden, the leader of the Building Trades Council — committees from the two councils drew up an agreement covering the cardinal principles and providing for the establishment of a system of arbitration.

Although the business agent was no longer permitted to call a strike, this agreement took little away from the unions. The principle of nonrestriction of output was accepted. Each trade was to decide whether or not it would adopt the introduction of machinery clause; where the union and the employers' association could not agree, the question was left to the Board of Arbitration. Each employer was granted at least one apprentice. The material restriction was modified to exclude prison-made goods and the following materials when made in nonunion factories — wood-mill work, cut and sawed stone, exterior marble work and common brick. Union men only were to be employed on all construction work.

The agreement was signed by the full committee of contractors and was ratified by their council. The union committee did not sign. To secure delay, the Building Trades Council referred the agreement to the constituent unions. On January 17 the contractors gave them ten days to make a definite

answer. No reply was received. The employers then prepared a new wage scale and a new set of rules, to go into effect on February 5, 1900. These, by providing work for Saturday afternoon, increased the working week to forty-eight hours. The attempt to enforce the new rules was the immediate cause of the dispute, which tied up the entire industry.

The employers received valuable aid from the material manufacturers and dealers. These firms found themselves in a delicate situation. On the one hand, they had agreements with the unions not to furnish materials to contractors employing nonunionists. On the other, the contractors, in return for lower prices, had agreed to buy materials only of firms in the material combine. As it was impossible to abide by both agreements, the material men chose to support the employers. By refusing to furnish materials to contractors outside the Council, they deprived the unions of whatever support independent builders might have given them. The brick manufacturers closed their yards until the dispute was over.[7]

(b) *Issues in the 1900 Lockout.* While the questions at issue seemed to be those of union control and restrictions, the real purpose of the lockout was to dissolve the Building Trades Council. When this became apparent the ranks of the workers were greatly solidified, and the contest was prolonged considerably. The chairman of the contractors' press committee said with the utmost frankness,

> Between the Contractors' Council and the Building Trades Council there can be no compromise. . . . There is not the slightest desire on the part of anyone to discourage membership in unions. But there is a definite and unconquerable purpose of fighting the Building Trades Council to death.[8]

Even when union funds were exhausted and violence made its appearance, the workers refused to desert their central organization, especially since the contractors insisted on maintaining their own.

The employers refused several offers to arbitrate the issues, claiming that the contest was one of principle which could not be arbitrated. "Only when the union withdraws from the Building Trades Council and agrees not to be affiliated with any organization of a like character during the life of the agreement" would the employers consent to discuss a settlement.[9]

The unions were willing to arbitrate every demand of the employers, but not to agree to the dissolution of their own council.

> We have worked here for a matter of ten or twelve years, organizing. We have paid out good money to get the respective organizations on a basis whereby we could adjust all grievances that might come up through the Building Trades Council. . . . Everything we have got we have through the organization of the Building Trades Council. It would be as just for us on our side to ask you people to disband the Contractors' Council today.[10]

But the employers replied that the Council brought ruin to the industry by its arrogance, that it fostered sympathetic strikes and that its officers were dishonest. Negotiations were broken off.

On June 26, almost seven months after the conflict began, the bricklayers and stonemasons withdrew from the Building Trades Council and signed a three-year agreement. Several unions deserted in the next few months; and on February 7, 1901, a whole year after the contest began, the carpenters withdrew, upon the promise by the employers of a Saturday half holiday. Further secession depleted the ranks of the Council, and on April 26, 1901, it voted to disband.[11]

4. Rehabilitation

Few significant changes occurred under the new régime. The unions were thoroughly defeated and discouraged; their closed-shop monopoly was broken, their funds exhausted and their membership depleted. The employers had a free hand in administering labor policies in the Chicago building industry.

However, although the contractors had been ably led and directed during the lockout, once the emergency of the moment was over, once the "common enemy" was defeated, the need for organization did not appear very pressing to a majority of them. Even during the lockout there had been much dissension between the "silk stocking" and the "prairie" contractors, and some resentment at the high-handed methods often used to keep men in the contractors' council. Between 1902 and 1911 the employers lost interest in their central organization which assured them control over the industry, and this left the council in a weakened condition. They believed that "peace and harmony" would be permanent, and watched with indifference the development of the unions' central organization.

Most of the agreements permitted the unions to join a central organization composed of skilled workers only, who were engaged in actual erection of buildings. The Building Trades League was the first substitute for the Building Trades Council. It was short-lived. The Associated Building Trades was organized two years later, in 1902. Madden tried to come back and for a time reorganized the Board of Business Agents. By 1903, when the agreements made after the lockout expired, the unions had regained enough strength to force the contractors to renew these, omitting the clause against affiliation with the Building Trades Council which, in the meantime, had also been reorganized. The cardinal principles were reiterated, and wage increases were granted. "The recuperative powers of defeated unions are certainly marvelous," wrote the secretary of the Contractors' Council.[12] By 1907 the unions had 31,000 members and had restored their central organization to a stable basis.

The history of the Chicago building trades showed that no set of principles had any value in stabilizing industrial relations when either or both sides were demoralized. The open-shop provisions in many of the agreements became a dead letter;

union men no longer were required to work with nonunion men in the same trade. Jurisdictional disputes became more frequent; more than one hundred, involving important unions, were handled by the Contractors' Council between 1908 and 1911. The chaotic conditions existing before the lockout were coming back. Graft and guerilla warfare returned. Jobs were stopped for petty reasons, such as the refusal of a contractor to "dig up" for picnics, dances and advertising. "Large operations were being 'insured' against strikes, and the premiums were not paid to regularly authorized insurance companies," but to union officials.[13] A new group arose among the unions, aiming at a better understanding on a basis of "business unionism."

The employers perceived the turn of events and felt that something would have to be done. Between 1906 and 1911 a number of contractors' trade associations had withdrawn from the Contractors' Council. But the amalgamation of the union factions and the increasing power of the unions led to the creation of the Building Construction Employers' Association. All labor disputes were to be settled through the association; agreements, to be valid, required its approval and the executive board was given extensive powers enabling it to take quick action.[14]

The Building Construction Employers' Association, for several reasons, was stronger than the Building Contractors' Council. The employers had stopped quibbling over principles which they were unwilling to accept. Definite provision was made for finances (two-tenths of one per cent for all work done in Cook County). Members were bonded and the bond was forfeited if the contractor failed to pay. To encourage membership, the organization urged that general contractors, members of the association, should sublet all subcontracts to members of affiliated associations. For some time dues were reduced in accordance with the number of subcontracts let to other members. The new association specifically declared against any intention to restrict competition or to control prices.

5. Industrial Relations after 1911

Both sides were now thoroughly organized. The Building Construction Employers' Association and the Building Trades Council were bringing order out of chaos by establishing joint machinery for industrial relations. Attempts were made to reduce the number of strikes and to eliminate sympathetic strikes. The year 1913 began with an important strike. A lockout involving 27,000 workers taught the unions that the employers were rehabilitated.[15] The Joint Conference Board emerged, the first super-trade arbitration body actually put into operation in the Chicago building industry. This was a permanent body of eight persons, representing the unions and contractors, which met weekly to adjudicate grievances.[16]

The Building Trades Council showed its good faith toward the Joint Conference Board on several occasions, first during the teamsters' strike in 1913, and later in expelling the sheet-metal workers for refusing to submit a dispute to the Board. The employers also ordered a lockout and threatened action against the sheet-metal contractors when the latter supported the union. Though these actions were never enforced, they indicated that both sides were willing to concede much in order to insure peace.

(a) *Uniform Agreement.* In May, 1915, nineteen trade agreements, all containing anti-strike clauses, but no two alike, expired. The Joint Conference Board accepted the stupendous task of drafting a Uniform Agreement. The interests of more than forty employers' trade associations, more than a thousand individual employers and nearly eighty thousand workers were involved. Up to this time agreements had run for varying periods of time, and the extreme irregularity in the presentation and negotiation of demands had led to spasmodic interruptions of work. For example, the carpenters' agreement ran for three years and expired in May; the plumbers' ran for two years and expired in March. If the carpenters' demands

were not met they could call out all the other trades on a sympathetic strike. No sooner would this strike be settled, than another might be called by the plumbers, whose agreement had expired in the meantime. In this way the industry had been kept in an almost constant state of turmoil.

The new agreement made it possible for the Joint Conference Board to render decisions in disputes involving more than one trade. Arbitration machinery was set up for each trade. The eight cardinal principles were recognized, and both sides pledged to observe the decisions of the Joint Conference Board.[17] The unions conceded all that had been asked of them in 1900 — no strikes, the abolition of the sympathetic strike, no boycott of nonunion materials, and compulsory arbitration of all disputes.

(b) *Recognition of Cardinal Principles.* Cardinal principles differing somewhat from those formulated in 1900 were adopted "as an absolute basis for the joint agreement. They take precedence over all other arrangements and all decisions, agreements and working rules to the contrary, are null and void." By incorporating them in the 1915 agreement, the unions did not concede as much ground as might appear on the surface.

The first principle, regarding the restriction of machinery, tools and appliances, was no longer very important. When first introduced in 1900 it aimed to correct the conditions existing particularly in the stonecutting trades, although several other unions had trade rules and constitutional provisions against the introduction of machinery. By this time, however, unions had adopted a more judicious policy toward machinery.

The second principle, specifying that prison-made materials only could be excluded by unions, was always a contentious issue. The sheet-metal workers and the carpenters, particularly, never actually consented to work on nonunion material. A complicating circumstance arose from the fact that the sheet-metal contractors and the mill owners in the Chicago

district on many occasions supported their respective unions in their effort to exclude nonunion material.

The third principle, abolishing all limitations as to the amount of work a man might perform during his working day, aimed at those practices of the early nineties allowing a lather to nail only so many bundles of lath a day, a bricklayer to lay so many bricks and a plasterer to cover so many square feet of wall space. Although most of the agreements since 1900 had contained provisions against limitation, the employers could not enforce these. There was no recognized standard for determining the amount of work which ought to be done in one day, and no way of proving that the worker practiced restriction. As a matter of fact, specific restrictions of a day's work were contained in agreements in the Chicago building trades until very recent years, the cardinal principles notwithstanding.

The fourth principle, that no person should have the right to interfere with the workmen during working hours, never meant much in practice. The shop steward and the business agent assumed the right to consult with the worker on the job. The real purpose of this provision was to prevent impositions by the business agent.

The fifth principle, on apprenticeship restriction, was interpreted to the satisfaction of the unions. "Apprentices" came to mean "an apprentice," one being allowed to each shop or on every job. Except prior to 1900 this had never been an important issue; the employer was none too eager to train apprentices, and the union rules never actually restricted the number of boys in the trade.

The sixth principle, that foremen were the agents of the employer, did not prevent the union from requiring that they maintain their union membership. This was never successfully challenged in the Chicago industry. The seventh and eighth cardinal principles were added to the agreements after 1915 and sought to give expression to grievances which were then current.

The seventh principle, "that workmen are at liberty to work for whomsoever they see fit,' 'was really aimed against the exclusive agreement, since it implied that union workers could be employed by contractors who were not members of the employers' association. It was also a guarantee that workers would not accept from independent contractors lower wages than those paid by the association contractors.

Finally, the principle that employers were at liberty to employ and discharge whomsoever they saw fit was nullified by sections 16 and 17 of the agreement, which limited them to the employment of local union men only. In case the union, after reasonable notice, was unable to furnish the required mechanics, any member of the international union might be hired. However, since all members of the international union working in Chicago were also members of the Chicago locals, this provision meant little. Judge Landis, in 1921, abolished it, and permitted employers to hire nonunion men if the unions were unable to furnish the required mechanics.

(c) *The Arbitration Plan.* The arbitration system adopted to govern the industry was uniform for each trade. Each side, in each trade, elected an arbitration committee, the number varying in different trades, and these committees formed the Trade Arbitration Board, which elected an umpire to settle the grievance whenever the two sides could not agree. Any decision of the Joint Arbitration Board (for the trade) could be appealed to the Joint Conference Board (for the entire industry) created by the two central organizations. If the question was local, the decision of the Joint Conference Board was final. If it was a question of a jurisdictional claim between two or more unions, then the decision could be appealed to the national agency for such disputes.

No cessation of work was allowed during or after a hearing by the Arbitration Board or during its appeal to the Joint Conference Board. The only "legal" strikes were those to collect wages. Sympathetic strikes were outlawed. By section 14 of

the Uniform Agreement, calling a strike because nonunion men in some other line of work or trade than that of building construction were employed on the building or job, or because nonunion men in other lines of work or trades were employed on any other building or job, was prohibited.

This agreement did not apply to the bricklayers' and hodcarriers' unions, because the Mason Contractors' Association was not a member of the Building Construction Employers' Association.[18] The greatest opposition to the Uniform Agreement came from the Building Trades Department of the American Federation of Labor. The Chicago agreements contained provisions contrary to the constitution of the Department — the no-strike clause, the nonunion-material clause, and the compulsory arbitration provision.[19] Some of the local unions also refused to accept the agreement, on the ground that it was unfair and would result in the open shop. The lathers' union struck against it and was expelled from the Building Trades Council. The carpenters, sheet-metal workers, painters, glaziers and machinists struck in sympathy or for other reasons. The employers ordered a lockout. A total of 60,000 men was involved.

Thus at the very beginning of the "new era" the two fundamental conditions — the strike and the sympathetic strike — were challenged. The contractors "stood pat." The lathers charged that the agreement was depriving their members of the constitutional right to strike; the painters opposed changing the date of expiration of their agreement from April 1 to May 31, because this change deprived them of the bargaining advantage of the spring-cleaning season. The other trades involved demanded wage increases. In a short time most of the industry was at a standstill. The building-material dealers were alarmed and, in support of the employers, closed their yards.

President Gompers and officials of the national unions intervened to get the agreements modified and bring them into har-

mony with the "laws" of the Building Trades Department and the American Federation of Labor. They achieved little success in this task. The executive committee of the Federation ordered the Chicago unions to abrogate the agreement and abolish the Joint Conference Board, under penalty of expulsion from the Building Trades Department. The Council disregarded the order, but it was not expelled.[20]

The strikes and lockouts were finally settled by compromises. The carpenters accepted a wage increase in return for their recognition of the cardinal principles. The employers' association threatened to expel the sheet-metal contractors if they supported the union restriction against nonunion materials. The Building Trades Council remained in turmoil. The lathers were not readmitted until 1920. A certain degree of stability returned to the industry for a while.

But even when the adjustment machinery was able to assert its authority, strikes and other methods of direct action were not entirely eliminated. Stabilization of industrial relations was only partially achieved. The Uniform Agreement and the Joint Conference Board succeeded in preventing disputes and stoppages on several significant occasions. On other occasions the adjustment machinery failed to produce peace, and in 1917 and 1918 it was further strained. The situation produced by the war resulted in a depressed condition in the building trades. Restrictions on building during the war period were followed by an increase in the volume of building construction. The carpenters led the labor group in demanding wage increases. To grant these demands would automatically force similar grants to several trades, on account of the recognized differentials. When the carpenters struck, a general lockout was ordered by the employers' association.

After ten weeks of idleness, involving more than a hundred thousand men in the erection and material trades, the employers' association capitulated. The carpenters and four other trades were granted increases. Moreover, the new agreement,

which ran to May 31, 1920, provided that a new wage scale should be determined before February 1. On that date, after a short period of negotiation, the wage rates of the skilled groups were raised to $1.25 an hour, and the common-labor rate was raised to $1.00 an hour. But more important, the differential system was abolished and a horizontal scale was established. This was a remarkable victory for the unions, as it eliminated one of the most frequent causes for dispute between the organizations.

The employers' association had conceded the union demands because their own ranks were divided. The Masons' and Carpenters' Association had not been affiliated with the Building Construction Employers' Association since 1907. Their interests frequently ran counter to the rules of the Building Construction Employers' Association. For example, in 1918 the millmen offered the carpenter contractors a trade reduction if they would agree not to use nonunion-made materials. By accepting this offer, the carpenter contractors violated the uniform agreement removing the restriction on nonunion material; and immediately antagonized the Building Construction Employers' Association. Another reason for not affiliating with the employers' association was that the carpenter and mason contractors felt that they would not have control over the association in proportion to their membership and contributions. With these grievances as a background, the Masons' and Carpenters' Associations, in 1920, organized a rival employers' organization, the Associated Builders of Chicago. A majority of the members of the new association were general contractors who had no agreement with the Building Trades Council and did not champion the closed shop in the industry. Thus, the employers in the industry were split into two groups just at the time when a rising market demanded unity in their ranks.

6. The 1921 Strike

The year 1921 opened with numerous small strikes which forecast a possible struggle when the agreements expired. At the same time, excessive costs retarded the revival of the building industry. To prevent a prolonged depression, the employers proposed a wage deflation. In line with this decision, the contractors attempted, before May, 1921, to reduce the wage scale of unskilled workers from $1.00 to $.75 an hour and of skilled workers from $1.25 to $1.00 an hour. In some trades a compromise rate of $1.12½ was suggested. But the unions would not deflate, and a general strike followed.

After six weeks of idleness, on June 17, 1921, the dispute was submitted to arbitration. The name of Judge K. M. Landis was chosen from a list of twelve.[21] The agreement to arbitrate provided for an immediate return of all trades to work at the old rate of $1.25 an hour. The carpenters and painters, who comprised almost half the total number of workers in the industry, refused to participate in the arbitration, the painters on the ground that their agreement had not yet expired.

(a) *The Landis Arbitration.* Although the agreement to arbitrate was broad enough to include rules and working conditions, it was understood that Judge Landis had no jurisdiction over these unless the unions and employers were unable to agree. Two days after Judge Landis accepted the task, and the day before the first hearing was held, the Illinois Chapter of the American Institute of Architects suggested to Judge Landis through a letter that the working rules were more important than the rate of wages; that the building public had not so much concern in the question as to what was paid to the building craftsmen as it had in the question as to how free construction might be from delay, annoyance, intimidation and graft. The letter analyzed each of the forty-seven trades, suggesting where revisions should be made. It pointed out that a reduction of 20 per cent in wages would make a difference of

only 5 or 6 per cent in the cost of building.[22] With these suggestions in mind, the arbitrator assumed the power to revise the rules and practices of all trades. Most of the unions and employers submitted; any other action would not have been expedient. The carpenters, elevator constructors, plasterers, sheet-metal workers, painters, glaziers and fixture hangers objected and withdrew from the arbitration proceedings.

Judge Landis did four things in his award of September 7, 1921. Of greatest importance was his abrogation and revision of the working rules. Although many of these were obnoxious and injurious to the industry, they were necessary as a protection against the uncertainties which the chaotic competitive structure in the industry made inevitable.

Second, Judge Landis cut wages. How he arrived at the particular wage rates he set was difficult to determine. The wages of the building trades from 1914 to 1920 had consistently lagged behind the cost of living. The scale set by Judge Landis was, except for hodcarriers and laborers, about 25 per cent less than the 1914 scale plus changes in the cost of living, using even so conservative a percentage of increase as that of the National Industrial Conference Board. Moreover, and in this the arbitrator erred significantly, his reductions set wages considerably below those which the employers had been willing to grant. And he not only set the wage scale of those trades which had agreed to arbitrate but also established a scale for those trades which had refused to be governed by the arbitration proceedings. Since these trades would not revise their rules, Judge Landis fixed their rate much lower than if the rules had been revised, on the theory that their work could not be as efficient under the restrictive rules.

Aside from the drastic wage reductions, the arbitrator made two fundamental changes in the wage situation. First, he abolished the long-established custom of "minimum" rates, which permitted wages in excess of the standard rate. The rates which he established were maximum rates. Not only was

this objectionable, but it could not be enforced. For a long time after the award employers paid wages at rates far in excess of these maximum rates.

Judge Landis also saw fit to restore the differentials between the wage rates of the different trades. "A uniform rate disregards skill, hazard, length of apprenticeship necessary and loss of time due to weather and seasonable demand." But the arbitrator did not possess any definite information or standard by which to measure these variations for each trade. Technical changes had eliminated the gradations in skill. Existing differentials were as much the result of the aggressiveness of unions and their economic positions at particular times as they were indices of actual differences in the arduousness of the work or in the amount of skill required. No scientific data existed, nor did the arbitrator have time to make investigations on which to base these differentials. In the words of one who has studied this dispute, "A differential scale may have much merit, but Judge Landis' method of arriving at the different rates was arbitrary and unscientific." [23]

The Landis agreement as drawn up provided for the peaceful adjustment of all disputes by arbitration; prohibited the stoppage of work individually or collectively, under prescribed penalties; ruled that, in case of scarcity of union help, non-union men should be permitted to work with union men until such time as union men could be obtained; any journeyman was permitted to use the tools of any trade — an issue which had caused a large number of jurisdictional disputes; small tasks of not more than thirty minutes' duration in any one day, belonging to a particular union, might be performed by any other trade at the discretion of the employer — an issue which had been a persistent cause of disputes; overtime work during the first two and one-half hours beyond a regular workday was to be paid at the rate of one and one-half times the regular wage; overtime beyond this was to be paid at double rates, as was work on Saturday afternoons, Sundays and holidays; shift

work was to be paid at the regular day rates; contractors not affiliated with the regular employers' association could avail themselves of the benefits of the agreement by joining the employers' association; there was to be no restriction of output, none on the use of machinery, methods and appliances, nor any against raw materials or manufactured material except prison-made goods; employers were to be given the right to employ and discharge whomsoever of the union men they pleased, and employes might work for whomsoever they saw fit; the foreman was to be exclusively the agent of the employer; and nothing was to prohibit an employer or a single member of the firm from working on his own job.

(b) *The Citizens' Committee to Enforce the Landis Award.* Ratification of the award was a mere formality, since both sides had signed an agreement to abide by it, although some unions strongly opposed the award. The Building Trades Council split into two groups on the issue of ratification. The method of voting in the council gave the small unions disproportionate voting power. The bricklayers led in the movement for acceptance.

The first trouble appeared in the carpentry trade. When the union refused to sign an agreement based on the Landis Award principles, the carpenter contractors hired nonunion men. They collected $125,000 to fight the carpenters' union but found the job too big for them. An appeal was made to the business organizations and influential citizens. Under the auspices of the Chicago Chamber of Commerce, the Illinois Manufacturers' Association, the Chicago Real Estate Board, the mortgage bankers, the large retail stores, and the stockyard interests, a "Citizens' Committee to Enforce the Landis Award" was organized. It instituted a virtual boycott against all unions which refused to abide by the award.

It seemed that for the first time since 1899 another struggle for existence would have to be waged by the unions. The anti-union employers on the Citizens' Committee were not in-

terested in any methods of compromise. If this were to be merely a fight between the carpenter contractors and their employes, the committee would not meddle. It knew, said the committee chairman, that "what the carpenters were refused this year, would be demanded the next year, and this the contractors, remembering the expense of a strike, would give in without a struggle." However, the committee was willing to finance the fight if the contractors would agree to a long-time program to stabilize the industry on the basis of employer-control. This, as summed up by the committee, was to be a "fight to clean up Chicago and give its citizens a permanent, sensible peace in the building industry." The committee offered to raise the money if the contractors would agree to the following conditions:

> That those unions that went along with the Landis Award would be supported; that in those trades, however, which refused to accept the Landis Award, workmen would be put to work who were willing to work under the terms of the Landis Award, and when they were put on they would stay on. . . . In those trades there would be an open shop for good, and there would be no settlement with the union officers. That the only way union men could come back to work was to sign individual agreements, and that at least fifty per cent of the men on the job should always be non-union men.[24]

The committee hoped to eliminate the 100 per cent closed-shop industry and to keep at least part of the trades on a permanent open-shop basis.

With this platform the Citizens' Committee was organized and started out to raise three million dollars. Eight unions, later thirteen, did not accept the Landis Award. The committee issued an ultimatum that if they did not accept it at once, nonunion men would be employed, and thereafter these trades would be open shop. The plasterers capitulated. The others accepted the challenge.

The executive board of the Citizens' Committee to Enforce the Landis Award consisted of eight persons. There were five

manufacturers operating nonunion shops, a merchant employing nonunion labor in his establishment, a banker and a retired Board of Trade operator. The chairman of the committee was a militant anti-union leader. It was feared that a committee not emphatically hostile to unionism might be too generous in a settlement. The chairman explained: "It is easy to win a battle, but not so easy to win a war and still more difficult after you had won the war to make terms of peace so that you would not have a recurrence of that war within the next generation. So we purposely made up this committee of men who had been in the union fighting game for years and had thought it out to its finality." [25]

The unions which refused to "go along" were declared "outlaws" and the country was combed for men to replace these outlawed workers. During the first year of the trouble more than 12,000 men were imported and over 600 guards were employed to protect them on the job and in their homes. Through extensive advertising, citizens were requested not to give even the most unimportant jobs to contractors who did not support the Landis Award. Lists of general contractors, subcontractors and architects who supported the award were broadcast throughout the local industry. The committee carried insurance for contractors, conducted a trade school for apprentices and maintained employment offices in the leading cities of the country. It hired a corps of detectives and inspectors to visit every "Landis Award Job" to see that the terms of the award and the rules of the committee were complied with. An elaborate card index of all Landis Award workers gave their rating for skill, sobriety, peacefulness and other qualities.

In the meantime the union ranks were divided. In January, 1922, the Building Trades Council had split into two groups. The pro-Landis unions were in the majority, and in October, 1922, the Council was reorganized with only the Landis unions —twenty-two in all. In June, 1923, the outlaw unions returned to the Council, with the exception of the carpenters, who were

kept out in conformity with a decision of the Building Trades Department.[26]

7. The Expiration of the Landis Award

(a) *Union Opposition to Renewing the Award.* The Landis Award expired on May 3, 1923. The differential wage scale was abolished and the horizontal scale was reinstated. But the Citizens' Committee decided to continue to enforce its principles even though the details of the contract had expired. President John M. Donlin of the Building Trades Department tried to induce the committee to reconsider its action in barring the outlaw trades permanently. But it would not be dissuaded.

> The Citizens' Committee believes that to recognize these unions and again restore them to full control of their respective trades would mean that all the effort, time and money spent would be wasted. . . . Should the present situation be compromised by restoring contractual relations with these unions, the conditions would be far worse than before . . . for no effective opposition . . . could again be organized within a generation.[27]

In the meantime, other difficulties developed. The unprecedented building "boom" greatly aided the unions in continuing their fight. The independent contractors were able to employ all workers of the anti-Landis trades. Under such conditions there was no particular pressure for those unions to seek a settlement. The demand for labor raised wages above the rates set by the award. Agreements notwithstanding, almost all the unions in Chicago increased their wages during 1924 and 1925 as much as the unions in New York City did. In spite of the activities of the Citizens' Committee the outlawed trades increased in membership — the carpenters, for instance, from 20,000 in 1920 to 32,000 in 1926. Nonunion carpenters who were brought into the city by the committee soon joined the union in order to protect their own interests.

(b) *The Contractors' Opposition to Renewing the Award.* Although most of the general contractors had signed up to sup-

port the award, many of them were restive under the conditions imposed by the committee. It was often more difficult to keep employers in line than to control the unions. Bomb squads, guards, strike breakers, and money could be used to deal with the unions. But such strategy could not control the contractors. For instance, the new Union Station project was awarded to one of the largest contractors in Chicago upon the promise that only Landis Award labor would be used on the job. But soon he found it expedient to repudiate his promise to the committee. The Union Station was erected under union conditions. Similar experiences with employers' solidarity led the chairman of the committee to remark, "You may rely on them [contractors] to do what business conditions dictate irrespective of promises to us." [28]

The contractors who carried on national operations were the next to revolt. When the award expired, the firms of George A. Fuller and Company, the Thompson Starrett Company and George Griffiths and Sons did not renew their allegiance "because they did not see fit to tie themselves further to any specific entity, the Citizens' Committee." [29] These contractors differed fundamentally with the policy which the Citizens' Committee pursued. "Our chief difference of opinion," wrote the President of the Thompson-Starrett Company,

> arose as regards the treatment to be accorded to the so-called outlawed unions who have repented in their action in not following the Landis Award and signified a willingness to enter into new contracts embodying the principles established by Judge Landis. The Citizens' Committee emphatically stated that the outlawed unions would have to remain outside forever. We argued that perpetuation of ill will and hatred was out of step with modern ideas for the conduct of relations between employers and employes. I asked the Citizens' Committee whether or not its main purpose was the perpetuation of the open shop in Chicago. . . . Mr. Donnelley replied that the Citizens' Committee had no objections to unions, but it felt that a union which has once misbehaved must never be recognized again. . . . Our experience covering a period of over twenty years clearly indicates that having to deal with unionism in the building

industry was unavoidable primarily because the average owner is unwilling to have his building operation made the battleground for deciding the issue between a union and a non-union operation; whereas a manufacturer, if he is opposed to unionism, might justify a battle for two or three years to gain the open shop, the average building owner, who builds but one operation, is unwilling to wage a battle for posterity. So long as having to deal with them [unions] was inherent in the situation the intelligent course to pursue would be to correct what was wrong in unionism rather than to exterminate it . . . this was clearly a case for a surgeon and not an undertaker.[30]

The G. A. Fuller Company reiterated this stand and added that "the class of labor supplied by the Committee was essentially unskilled, resulting in poor workmanship, extraordinarily high costs and dissatisfied owners, and increasing the costs of building operations." [31]

By June, 1924, many individual contractors, though affiliated with the Building Construction Employers' Association, signed agreements whose conditions were contrary to the Landis Award principles. Many of these contractors were no doubt influenced by union threats of sympathetic strikes to force recognition of the ousted trades. The committee threatened to raise another $3,000,000 to fight those unions which invoked the sympathetic strike. The allegiance of architects was again secured.

By 1926 the Building Trades Council resumed its militancy and instructed the unions not to sign agreements which required them to work with nonunion men. It was not asking for the right to declare sympathetic strikes, but for the closed shop. In January, 1927, the Building Construction Employers' Association succumbed to the union demands. Under the agreement then drawn up it severed its connection with the Citizens' Committee and forced its members to accept union conditions or cut adrift from the protection of the association. The agreement legalized the sympathetic strike in cases where nonunion men were employed on a building. This agreement repudiated definitely the Landis Award and reëstablished for

the entire industry the agencies for joint relations which had been developed between 1913 and 1920.

What was the next step for the committee to take? It refused to disband. When the 1927 agreement was signed and the committee was deserted, it issued a statement saying that there were about 100 contractors who still desired its services. It will remain in existence, according to its chairman, "as long as there is one contractor who demands its services."

8. Conclusions and Summary

The history of industrial relations in this city presents interesting data as to essential conditions for stability in the industry. Before 1900 the workers were organized in some thirty unions, banded together in a powerful central body — the Building Trades Council. They had no opposing organization of employers to check their power. The numerous contractors' associations gave little attention to labor problems.

Consequently, the decade of 1890 to 1900 was marked by a period of union domination with the attendant evils of graft, petty grievances, frequent stoppages, jurisdictional disputes and a type of collective bargaining decidedly dictatorial. General instability and uncertainty characterized the decade. The climax occurred in 1900, when the employers, through the famous lockout of that year, disrupted the unions' Building Trades Council, and formed a central organization of their own with large powers and ample funds. The improvement expected in industrial relations after the 1900 lockout did not materialize, however. The now disorganized and weakened workers, deprived of their central organization, resorted to guerilla warfare. At the same time the employers, having achieved victory, began to lose interest in their organization — a frequent weakness of employers' associations. As a result, by 1910 the situation differed little from that existing before the 1900 lockout. These two decades taught the building industry of Chicago that a one-sided organization was not conducive to stable industrial relations.

By 1910 the unions had regained their former power, and their central organization was revived. This time the employers were not able to disrupt them. They did not make the attempt. However, by reorganizing their own forces, the employers were able to cope with the Building Trades Council. A different and more stable decade in industrial relations followed. Machinery for joint relations functioned successfully for some years. Jurisdictional disputes were reduced considerably. A code of principles for joint relations became a part of all agreements. After 1915 a standard agreement for all trades made working conditions uniform. In more than thirty trades, joint arbitration boards, representing both the contractors and workers, were put on a permanent basis and provided a sound method for settling grievances. A super-trade conciliation and conference board was created, to settle those controversies between the trades which the trade boards were unable to adjudicate. The period between 1913 and 1921 can, therefore, be said to be the most fruitful for the development of those methods and agencies which promise to minimize friction between organized workers and their employers.

The one conclusion to be reached from this development is that *joint* organization is essential if industrial relations are to rise above jungle practices. The Chicago development shows clearly that one-sided organization makes for instability and permits serious evils, which not only raise the cost of building but demoralize any effort toward improvement. The limiting factor thus far is the disunity in the ranks of contractors. Employers in the Chicago building trades are not as effectively organized as they might be; their organization is not as powerful as that of the New York employers, for example, and in bargaining power is far behind the labor organizations in Chicago. Until the contractors recognize the need for greater group cooperation the situation will always be difficult to control.

But at the same time, the history of joint relations in the Chicago building industry points to another conclusion. Al-

though a one-sided organization may prevent harmony in industrial relations there is greater opportunity for anti-public combinations to be made between unions and employers when both sides are organized effectively and operate on the basis of trade agreements. The appearance in 1921 of the Citizens' Committee to Enforce the Landis Award was in part an outgrowth of this situation. The immediate purpose of the committee's intervening in the industry was to enforce an award intended to remedy a particular difficulty. The general corruption prevalent in the industry made the committee feel, however, that it was imperative to enlarge its program to include a "house cleaning" which should remove from power the men and organizations most responsible for the state of affairs.

At least one aspect of the work of this "public" body was successful, although the beginnings had been made by the anti-trust prosecutions which preceded the organization of the committee by some months. For six years the Chicago building industry did not have a major labor disturbance, and graft and corruption were largely eliminated. A more significant achievement was that union and nonunion men worked on the same buildings peacefully, but it must be remembered that the thirteen outlawed trades were generally successful in preventing their men from working on buildings together with non-unionists.

The Landis Award was only partially enforced, however. The wage scale set by the arbitrator was disregarded almost from the beginning; through the device of "bonuses" contractors paid more than the award stipulated. The differential principle which the award reinstituted was abolished at the first opportunity. Peace was made with the boycotted trades as soon as the contractors felt strong enough to defy the committee; and finally, after six years of vacillating and compromising, the contractors repudiated the committee entirely.

The ability of the Citizens' Committee to perform its task for six years is in itself significant. That a group, wholly out-

side the building industry, could inject itself into the industry, lay down a code of principles, take control of the labor policy and read the "riot act" to all those who disagreed with its program, signified that the groups in the industry lacked some very essential elements of self-government. It indicated that the employing element in the building industry could not control the situation alone; that if the employers were to lay down the rules of the game, an outside organization must finance the campaign, camouflage its purpose, drive recalcitrant employers into line and bolster up the employers' organization.

But the point was soon reached where employers had to choose between losing their independence to a citizens' committee or depending upon the fairness of the unions. From the outcome in Chicago, a large number of contractors, at least, preferred taking their chances with a strongly organized labor movement and, had they had the courage, would long before have asked that the committee withdraw from the field.

With the committee discarded, the organized employers and the unions have again resumed contractual relations on the basis of full recognition. Only out of their deliberations can the structure for industrial government in the Chicago building industry be developed. While a third party may at times be useful in eliminating temporary abuses, its continued presence in the industry only prolongs the period of turmoil, and postpones the period of adjustment and stabilization.

CHAPTER XIV

THE AMERICAN PLAN IN SAN FRANCISCO

THE building-trades situation in San Francisco prior to 1921 is summed up as follows by one of the leading participants in the industrial struggle there:

> The entire economic power of San Francisco lay in the hands of the labor leaders. Employers did business under such conditions as they could cajole out of the union. Wages were fixed by the men, not by the employers. Working conditions were ordained by resolutions of the various trades councils, and industry humbly submitted. Restrictions were imposed and conditions forced. The entire initiative and the entire control in the human relationships of industry lay with the employes. In the general industries, over ninety percent. of all who toil with their hands for their daily bread belonged to labor unions, representing over one hundred different crafts or lines of endeavor. Their power and prestige was the reward of organization because they had been skillfully amalgamated into two or three leading labor councils. Probably the largest in point of numbers was the Labor Council. Probably the most effective and best organized was the Building Trades Council.[1]

Labor leaders admitted that this picture was not exaggerated. Throughout the country union organization in San Francisco was held up as an enviable example of thoroughness and efficiency. The solidarity of the members was equally praised.

> A morale had been developed of organized effectiveness. The men had learned and were exulting in the sense of organization power. The grievance of the tinsmith and the hodcarrier, or the lowly laborer, became, through the system of organization and amalgamation, the common grievance of every man carrying a union card. And it is no figure of speech to say, difficulty with even the least of the men employed would almost instantly shut down all work of all trades in any building or industry.[2]

Today this situation is reversed. The powerful Building Trades Council is stripped of its old influence in building-trades affairs. Collective bargaining between the unions and the building employers is prohibited as being "against the principles of the community." While the more responsible contractors observe a code of practice covering working conditions and wages, collective agreements, in the sense in which this term is generally employed, have been entirely eliminated. With the less stable contractors individual bargaining on matters of wages, hours and conditions of work frequently prevails. Customs, practices and jurisdictional definitions, which either grew up or were established by union regulation, have been abolished "in the interests of efficiency," and union business agents receive no "official" recognition from the employers.

A new issue is injected into industrial relations — the right of the public to be represented in the councils of the industry. In San Francisco a powerful public body has assumed complete control and sits in judgment over the acts of unions and employers. In place of former union domination, this public group tries to maintain a so-called balance of power between unions and employers. It claims that it acts as a buffer between the employers and the unions, seeking to protect a man's right to work and an employer's right to hire men and fire them irrespective of their union affiliation. The American Plan is substituted for the closed shop. Scientific management and the employer's right to conduct his business without interference superseded union rules for controlling the job.

What produced this phenomenal change in so short a period of time? Why was so powerful and effective an organization, with a quarter of a century of experience, defeated, and all its power and prestige crumbled after a relatively short strike? This chapter examines the history, program, tactics and leadership of this labor group and appraises the causes which were responsible for its downfall.

1. Trade-Union Activities to 1921

San Francisco has always occupied a leading position in the western labor movement. A number of natural advantages lent strength to the San Francisco unions: the central location of the city, the concentration of population, the harbor and the absence of a competing industrial center to supply skilled labor during strikes. The present labor movement in the city dates from 1901, although the beginnings reach back to 1849. A depression in 1855, a slight revival in 1864, another depression in 1872, followed by the organization of several crafts whose progress was again checked in 1893 — these tell the story of the struggle for existence against the vicissitudes of prosperity and depression.[3] The San Francisco Building Trades Council, the most powerful and efficient body of organized workers in California, was organized in 1894. Since 1901, the affiliation of every craft has permitted the Council practically to dictate terms of employment in the building trades of San Francisco.[4]

A six month's strike of millworkers in 1901 was the first test of union strength. Not only did the workers win the eight-hour day, the closed shop and the right to place the union label on all lumber, but another outcome of the contest was the establishment of the first written arbitration agreement in the San Francisco building trades. Union power and prestige were greatly accelerated by the earthquake and fire in 1906 and the exposition in 1915, which events increased the need for building mechanics. Employers conceded union demands readily. This solidified the ranks of the workers, enlarged the functions of their central organization, and increased its power, enabling it to control inter-union disputes and to keep the affiliated unions "in line."

The tremendous power wielded by the Building Trades Council finally led it into politics. The Union Labor Party was formed in 1900; P. H. McCarthy, president of the Council, as-

sumed its leadership. A member of the musicians' union became San Francisco's first labor mayor; and what followed has come to be known as the greatest graft era in the history of the city.[5] In 1909 P. H. McCarthy was elected mayor.

2. P. H. McCarthy — The Leader

To understand the San Francisco Labor movement one must study the personality of the president of the Building Trades Council. P. H. McCarthy, a carpenter, appeared on the horizon of the labor movement as early as 1895. He soon won supporters in the Building Trades Council; and when in 1900 he was appointed Civil Service Commissioner of San Francisco and in 1909 elected mayor, he was able to complete his control by rewarding his friends with political jobs. McCarthy was elected President of the San Francisco Building Trades Council in 1901 and held that position until his resignation in 1922.

No business agent was appointed by any union without McCarthy's approval. Once approved, a man held office so long as he followed McCarthy's instructions. Any union which tolerated recalcitrant business agents on the ground that it reserved the right to judge its own members and officials was expelled from the Building Trades Council. This was usually sufficient to cool its ardor for independent action. In subduing opposition among the rank and file high-handed methods were often used. McCarthy brooked no opposition. He prohibited a union from sponsoring any movement which might develop an opponent to challenge his supremacy. He joined the Union Labor Party to prevent its control from going to someone else. When the unions outside the building trades organized the Labor Council, McCarthy forbade the building-trades unions to join it.[6]

These dictatorial tactics help to explain the peculiar kind of collective bargaining in San Francisco. McCarthy maintained that written trade agreements led to war. Machinery for joint industrial relations was only a source of argument; discussion

did not accomplish things. Referring to the methods of adjusting labor relations in the New York building trades, McCarthy said: "It is the best Open Shop lieutenant in America. It stands for the discussion of everything save the particular question at issue. It is designed to destroy rather than build up the legitimate organized labor movement." [7]

This was why the building industry in San Francisco resorted to arbitration only once in the thirty years of its organized history. At times particular disputes were referred to arbitration tribunals, but the unions and the employers usually settled their differences before a decision was given. For over a quarter of a century McCarthy took a personal interest in most of the negotiations between the union officials and the employers. While he permitted the local officials a free hand in their dealings with employers, he came into the picture whenever there was a likelihood of an open break or when the "orders" given to the employer were outrageous.[8]

3. The Building Trades Council

Under McCarthy's leadership the Building Trades Council developed into the most effective labor organization in the country. It not only succeeded in organizing all the building-trades workers in the San Francisco region, but was able to avoid having many of the inter-union disputes, which were such a disorganizing factor in other communities. While the methods used to secure these ends may be open to criticism, it cannot be denied that the Council was able to obtain higher wages, shorter hours and better conditions of employment for its members than would otherwise have been possible.[9]

(a) *Control over Strikes.* The singular success of the Council was due to a number of reasons. The permanency of its officials had much to do with its effectiveness and its uniform policies. Its president held office for twenty-one years and other officials for comparatively long periods.[10]

Severe though the Council may have been with recalcitrant unions and with employers not in sympathy with its demands, it had secured a certain minimum of stability in industrial relations by its control over strikes. Following strikes by teamsters and millworkers in 1901, there were many years of comparative peace. There has been no general strike in the San Francisco building industry for more than a quarter-century. There were even fewer trade strikes than elsewhere. No union could demand increased wages, shorter hours or better working conditions unless the Council had first approved the demands. A union which refused to accept the verdict of the Council on such matters was ousted and declared unfair. Whenever controversies arose, the Council made every effort to adjust them by means of conciliation or arbitration, although its constitution provided for neither method.

(b) *Jurisdictional Disputes.* Another, and more important, achievement of the Council was its control over jurisdictional disputes. McCarthy always stressed the importance of presenting a solid front to the employers. While numerous jurisdictional rules, many of them uneconomic and arbitrary, were rigidly enforced, the disputes among the unions over their conflicting claims seldom resulted in an open break. The Jurisdictional Committee of the Council, established in 1908, had absolute authority to settle such disputes. The decision could be appealed to the State Building Trades Council or to the Building Trades Department. The methods of enforcement rather than the machinery for adjustment made jurisdictional disputes unimportant in San Francisco. If a union refused to abide by a decision, the usual means of coercion, expulsion and the threat of a dual union, soon brought compliance.

While "political" decisions in labor disputes were by no means absent, they were less common than in other communities. President McCarthy forced an award against his own carpenters' union, one of the strongest in the city, in a dispute over metal trim. An award in favor of the tile setters against

the bricklayers also indicated that there was less favoritism on account of union strength in San Francisco than in other cities. At the same time, McCarthy was a master in the art of trade-union politics, and in order to maintain his control in the Council he resorted to every political device. Many jurisdictional controversies, not amenable to ordinary methods of solution, were settled through "political methods." In another manner San Francisco's building unions differed from those of the east and middle west. Though the internal affairs of the unions may have been conducted by high-handed methods, no reputable employer ever charged that the officials of the San Francisco building-trades unions accepted graft, or that the various "strike insurance" methods were used as in the eastern cities during the "building boom" periods. Labor officials felt justly proud of this record.

(c) *Collective Bargaining.* In view of the situation after 1921, the type of collective bargaining developed by this system of autocratic control must be examined in its relation to the entire problem. Although collective bargaining existed in some trades, the Building Trades Council did not sponsor signed agreements. The constitution of the Council contained no provision relative to the drafting of trade agreements or to their use either by the Council or by its member unions. The officials of the Council desired the free and unhindered right to change wages, hours and working conditions whenever they could do so.[11]

P. H. McCarthy, in testifying before the United States Industrial Relations Commission on September 1, 1914, said:

> We do not believe in those signed agreements that have possession of you gentlemen. We believe they are contrary to certain conditions within the confines of this country. They create trouble at about the time of the expiration of the agreement. Everybody knows that they do.
>
> Time limits are very dangerous. Time limits act as incentives to both parties to make certain demands.

We will not sign time agreements, and we believe that time agreements are vicious and we are not engaging in anything that is vicious.[12]

The Building Trades Council thus stood committed to a policy antagonistic to trade agreements, except in those cases where arbitration proceedings were necessary to settle a controversy between employers and employes. The Council was a party to but two agreements up to 1915. The first, drawn up in 1901 and readopted from year to year, was with the Planing Mill Owners' Association. It ended a very serious labor struggle against the use of imported "unfair" lumber. The other agreement terminated a strike for higher wages against the Master Painters' and Decorators' Association in June, 1914. Both agreements were signed because an arbitration board had been called in. While the Council was not enthusiastic about written agreements, several trades had such contracts with their employers.

Even if collective bargaining had been approved by the Council, it might have produced no different conditions than existed without it. To be equitable, the parties must be of equal strength. In San Francisco the preponderance of power was with the unions. The employers belonged to various trade associations, but their affiliation with a central body of building-trades employers was spasmodic. Moreover, neither the central organization of employers nor the separate trade associations were interested in collective agreements. Only at times when a wage dispute arose or an important firm was declared unfair did they manifest any concern in the matter. The employers' organizations did not meet with the unions or with the Building Trades Council to discuss wages, hours or working conditions, except to make objections to the proposed demands of the unions. McCarthy described to the Commission on Industrial Relations how collective bargaining was carried on.

The union adopts a schedule, it is passed on to the Building Trades Council, referred by the Building Trades Council to the executive board, by the executive board it is referred to a representative in the field, and these representatives interview each and every individual in that department, get an expression of opinion from them. . . . When they get a majority of employers in favor thereof, at a regular meeting they decide accordingly, and so notify their employers.

Q. As a matter of fact you recognize that this is not what is usually called collective bargaining.

A. As a matter of fact, Professor [John R. Commons], I recognize that . . . it is collective bargaining.

Q. It is collective bargaining on your side.

A. On every side; on my side and on their side.

Q. And individually on their side.

A. No. You are mistaken there, Professor. They have their associations. . . . They take it to their associations.

Q. Do the representatives of your association meet their representatives . . . and jointly agree upon all questions of wages, hours and conditions? . . .

A. When the Council takes this step it becomes the law, and then it is subject for discussion and not before.

Q. You do not meet the employers?

A. Absolutely. If there is any objection, then we meet. That is collective bargaining, just and correct.[13]

(d) *Working Rules.* The general nature and regulatory character of the working rules in the building trades have already been discussed. However, it is believed by many that the unions in San Francisco stepped beyond the bounds of reason in the imposition of restrictive rules upon the industry. The absence of collective bargaining was in part responsible for this condition — for the unions took it upon themselves to control the jobs. Rules limiting the number of apprentices were particularly onerous. Equally objectionable were those restricting the use of labor-saving devices and the amount of work a man might do in a day. Collusive agreements also imposed the burden of increased costs upon the industry.[14] The brick manufacturers, for example, allowed the unions to collect

a tax of one-half of one per cent of the value of the brick contract, the money to be used to support a publicity bureau to advance the use of brick.[15]

4. The 1921 Strike and Lockout

We come now to a consideration of the events which preceded the establishment of the American Plan in the building industry of San Francisco. Economic conditions until the World War gave the unions complete control. There was little occasion for strikes. After the war the unions became restive. Rapid changes in the cost of living spurred on frequent demands for revision of the wage scales. An effort to control this situation led to the organization of the Building Industries Association in 1917, but this group was not sufficiently effective in regulating the industry. In 1920 another effort resulted in a joint agreement to stabilize wage rates, to prohibit strikes and lockouts and to arbitrate all differences.[16] But this also failed to appease many of the trades whose wages lagged behind the cost of living. Finally, in the summer of 1920, the Building Trades Council, unable to control its membership and fearful that the strikes then in progress or threatened might spread to all trades in the industry, appealed to the San Francisco Chamber of Commerce to arbitrate the various disputes.[17]

The very fact that P. H. McCarthy, for over a quarter of a century the czar of the building-trades unions, found it necessary to seek aid from an arbitration board on a wage dispute, was in itself significant. McCarthy had little respect for parliamentary methods, and it is doubtful whether he really desired the injection of an arbitration board. It is known that between 1920 and 1921 a more or less potent "rank and file movement" developed in San Francisco among the building-trades unions. McCarthy feared that he could not control the unions should they take concerted action at this time. Considering the usual hostile attitude of the leader toward arbitration machinery for dealing with industrial relations, that McCarthy should at this

time advocate arbitration indicated that the situation was a particularly difficult one.

(a) *The Arbitration Agreement.* At the first hearing before the Board of Arbitration questions arose as to whether the Board was to consider disputes of the fifteen trades demanding wage increases only or whether it was empowered to pass upon the whole question of wages. The three arbitrators consented to serve provided that a written arbitration agreement be drawn up stating clearly and exactly the powers and jurisdiction of the Board and binding the signatory parties to abide by the decisions of the Board made under the terms of such an agreement.

The following agreement was drawn up and accepted January 18, 1921:

1. In the matter of arbitration between the Builders' Exchange and the Building Trades Council, we hereby accept the following three arbitrators, to wit: Archbishop E. J. Hanna, Max O. Sloss, ex-Associate Justice of the Supreme Court of California, and George L. Bell, Consultant in Industrial Relations and Management.

2. It is understood that all three arbitrators are to be deemed impartial arbitrators of all controversies, and under no circumstances is any one of them to be considered a representative on the Board of Arbitration of either of the contending parties.

3. It is agreed that this Board shall sit as a continuing Board of Arbitration as to hours, wages and working conditions to which shall be submitted all disputes as to hours, wages and working conditions in building trades where there are no disputes now, as well as in those where there are, when and as such disputes arise between the signatory parties, and that the decision of the board shall be accepted as final and carried out by all parties. This step is taken in order to provide a permanent method of settling amicably and in a reasonable manner labor disputes in this city affecting the building trades, and with the hope that building operations henceforth may be put on a certain and stable basis — a result which will be of advantage to the worker, to the employers and to the public.

4. It is also agreed that the Board of Arbitration may go into all questions affecting the general building situation and call upon the signatory parties for all information and copies of contracts or agreements concerning any phases which the Board desires to investigate.

5. It is further agreed that the Board of Arbitration may incur such expenses as it deems necessary for the employment of investigators and clerical assistance; and that the entire expense incurred by the Board will be shared equally by the signatory parties.

6. It is understood that all hearings are to be conducted as public sessions, save and except such special hearings as in the judgment of the Board should be held in executive session.

7. It is understood that the trades in which there are now disputes concerning hours, wages or working conditions, which disputes will be immediately submitted to the Board, are as follows: [here follows a list of the seventeen trades which requested wage increases].

At the time this agreement was signed there was some discussion by the Builders' Exchange concerning certain rules and practices which it deemed injurious to the contractors' interests. The Exchange urged that the Board of Arbitration be given power to consider these rules and to make modifications whenever necessary. The union refused to submit them for arbitration because, in many cases, they had been established by the International Union. However, certain issues they were willing to submit to the Board, either for an expression of opinion, or, in some instances, for a final decision. Accordingly, the Board might be asked by either party "to express its opinion, but that said opinion will not be regarded as a binding decision," on the number of apprentices to be allowed in each shop, or the length of time apprentices must serve before becoming journeymen; the initiation fee a union may charge; and the eligibility of applicants for the union.

On the following general subjects both parties are now in agreement, but if a dispute arises the Board of Arbitration may render not only an opinion but a binding decision:

1. Right of employers to hire men direct and not through the business agents of the unions.

2. Right of employers, when union men are not available, to hire non-union men, with the understanding that they shall join the union.

3. Employers to have the right to discharge unsatisfactory workmen.

4. The erection of buildings to be governed only by the plans and specifications of the architect, the laws of the State of California, and the local building ordinances wherever there are such.

5. That neither employers' organizations nor unions shall put any restrictions upon output, nor any limits upon the amount of work which a workman, or workmen, shall turn out during the work day.

6. An established minimum wage scale per hour.

7. An additional amount to be paid per day to foremen, more than to journeymen, provided that such minimum amount shall be one dollar per day.

(b) *Hearings of the Arbitration Board.* In accordance with this agreement, the Board held hearings from January 21 to February 9, 1921. Foreseeing that many weeks or months would be consumed in the presentation of oral testimony, the Board suggested that both sides file written briefs on wages, on the basis of which it would announce a temporary award, leaving all other issues for later consideration. At the end of February the Building Trades Council filed a brief asking that fifteen of the seventeen crafts be granted wage increases, ranging from fifty cents to a dollar per day. In a few days the Building Trades Council filed a written rejoinder to each of the separate answers of the Builders' Exchange, again forcibly urging increases, "but in no instance nor in any manner, did the Building Trades Council contest the right of the Builders' Exchange to request a *reduction* in the existing wage scales, nor did it question the Board's power to consider the question of reductions." [18]

Both parties filed supplementary printed arguments, carefully prepared and stressing data and statistics with regard to the cost of living. The arguments of the attorney for the employers closed with the following paragraph:

> We are asking, therefore, that wages be reduced in accordance with our answers in the various crafts. But, in addition to that, we are asking that *all wages* in the building trades must be reduced and graded so that they will bear some reasonable relation to the amount and the character of the services rendered to the end that the public have some relief from the present intolerable building costs.

(c) *The Award.* In the arguments of the Building Trades Council it was urged repeatedly that the cost of living should be the basis of wage computations. On March 31, 1921, the Board announced its decision, awarding a decrease in wages of 7.5 per cent to all the crafts involved.[19]

The Builders' Exchange expressed disappointment that the Temporary Award made only a slight reduction in wages, but declared that it would abide by the decision of the Board. The Building Trades Council was chagrined that a reduction was made. Two days later Mr. McDonald of the Building Trades Council protested the Temporary Award on the ground that the Board had no jurisdiction to make decreases in the existing wage scale. According to the Council, the jurisdiction of the Board was limited to a consideration of the continuance of the existing wage scale, or to granting in whole or in part the increases which the Building Trades Council demanded for the crafts involved. The Board thereupon decided to "suspend the effective date of the award until such time as a full meeting of the Board might be had." On April 24 the Board met and, after a formal hearing at which both parties presented lengthy arguments concerning the interpretation of the agreement specifying the powers and jurisdiction of the Board, issued a Supplementary Decision on April 29, affirming the original award and denying the request of the Building Trades Council.[20]

The Building Trades Council did not wait for the final pronouncement of the Arbitration Board, but on the same day sent a letter to each member of the Board which concluded with the following sentence: "Because of these facts . . . the Building Trades Council, by a unanimous vote, directed us to notify you we decline to proceed further in the arbitration cases."[21] The Board felt that, in view of the Council's attitude, the only course of action possible was to cease functioning.

(d) *The Strike against the Award.* The Supplementary Decision of the Board had fixed May ninth as the day on which the

award was to go into effect. On that date the fifteen unions affected by the award struck against the wage scale set by the Arbitration Board. Then more than 10,000 mechanics struck in sympathy, and the entire building industry in the city was at a standstill. There was still hope that a complete break would be avoided and that the strike, merely a protest against the decision of the Board, would be settled. Citizens and the Chamber of Commerce urged the Building Trades Council to abide by the award and call off the strike. The Council, however, remained obdurate and some contractors wished to resume operations, with imported labor. The Chamber of Commerce promised to back the contractors, even to the extent of an open-shop drive, if the strike was not called off within a week. The Chamber of Commerce's statement read:

> In all the conferences leading to the creation of the Board of Arbitration and the definitions of its jurisdiction, as well as in all the subsequent hearings and proceedings, it was clearly understood that the closed shop union basis of employment would prevail. Neither the representatives of the building trades employers nor the Chamber of Commerce made one suggestion looking toward the introduction of the open shop principle in the industry.[22]

But now that the unions had violated their agreement and repudiated the award, the employers and the Chamber of Commerce were no longer bound to observe closed-shop conditions. In this breach of faith, the employers in general, and the building-trades employers in particular, saw the best of opportunities to test the strength of the labor movement.

The Chamber of Commerce secured pledges from business interests for $1,250,000, one-fourth of which was raised almost immediately. Encouraged by the promise of a fund with which to carry on the fight, and by the fact that it had behind it the Chamber of Commerce and, through the Chamber, the business community, the Builders' Exchange on June 2 notified the unions that on June 13 building operations would be resumed under American Plan conditions. The Building Trades Coun-

cil, perceiving that public support might not be on its side if it rejected the award, wrote to the Builders' Exchange the same day (June 2) that though "it still maintains that the Board of Arbitration exceeded its authority . . . yet, in the interests of industrial peace and the welfare of San Francisco, the Building Trades Council is willing to accept the decision of the Board of Arbitration." But the Builders' Exchange, realizing that there would never be another time so propitious to fight the unions, would not be cheated out of its opportunity. It replied next day:

> Nothing less than explicitly unqualified acceptance of the full and complete jurisdiction of the Arbitration Board could have been considered. It [the Council's letter] remains significantly silent as to whether it will accept the full jurisdiction of the Arbitration Board and will concede the right to make further revisions in hours, wages and working conditions.[23]

The plight of the Building Trades Council may be judged from its action of June 11. It called a special meeting, at which it accepted the full decision of the Board of Arbitration, as agreed to on January 21, 1921, and reaffirmed the agreement, including the right to make further revisions in hours, wages and working conditions. To this last surrender, the Builders' Exchange replied that it was too late; that the time had arrived to change the situation in the building industry.

5. The American Plan Established

On June 13 the American Plan was instituted. Before the end of July several thousand mechanics were imported and a hotel was rented for them. They were guaranteed six months' work at the wages set by the Arbitration Board. With these as a nucleus work was resumed on many operations and while the strike was not terminated until September, it lost its effectiveness soon after it was begun. The workers gradually returned under conditions heretofore unknown in any large industry in San Francisco. The Building Trades Council did not anticipate

these obstacles; its expectation to "win again" was shattered. Before long every employer in the city's building industry was either willingly or unwillingly supporting the American Plan.

What magic power did the employers use to defeat this yet undefeated labor movement? What tactics and strike strategy did they employ to overcome the "union habit" which had governed this industry for so long? How were they able to control that large group of employers who had heretofore supported the unions in every industrial struggle?

The employers' plans were predetermined, incidentally, not by themselves, but by the Chamber of Commerce and other business groups. Winning the strike in the building trades became merely incidental to the larger issues of breaking the power of the unions and inaugurating the American Plan basis of employment in all industries. The president of the Chamber of Commerce became chairman of a committee to enforce the American Plan. The Industrial Association of San Francisco was organized. Mr. M. J. Kuhl, for many years attorney for the Chamber of Commerce, and one of the ablest lawyers on the Pacific Coast, was appointed executive director with a permanent staff.

The first work of the Association was to secure the coöperation of the employers. Certain unions had voted to accept the wage cut, if the employers would concede the closed shop. Many employers were willing to do this, and the Industrial Association had to resort to the strongest pressure to prevent contractors from entering into closed-shop agreements. The methods adopted by the Association in many instances went further than any used by the strongest closed-shop unions. Union strength often depended upon the support received from contractors not affiliated with the regular trade associations, upon whom no pressure could be exerted. In San Francisco there were many contractors not affiliated with open-shop plans nor in sympathy with these. The unions depended upon such contractors to help them win against the Industrial Asso-

ciation. However, the Association had a very aggressive leadership and within a short time brought the recalcitrant contractors into line. The tactics were simple and effective.

(a) *Reimbursement for Losses.* A very effective method of inducing contractors to support the American Plan was to share the losses due to sabotage or delays. The Industrial Association did not guarantee profits, but it agreed to underwrite all jobs in operation at the time of the inception of the strike and to reimburse contractors for *all actual cash losses.* In other words, where the cost of the job exceeded the contract price, the Industrial Association bore the entire difference or shared it with the owner. The Association felt that the industry must first be established on the American Plan basis before the "incidental losses" could be shifted to the individual contractor. This method was also used later in isolated strikes such as the plasterers' strike in 1923.

(b) *The Permit System.* But not all contractors could be brought to terms by such guarantees. Many of them were former union men, or had employed union men exclusively during all their business life. It was no simple task to convince these that the union closed shop was gone permanently. Others feared the reprisals which would undoubtedly arise should the unions come back to power. These formed a large group of contractors in sympathy with the unions, or, at least, unwilling to support the American Plan at that time. Other tactics were used to secure compliance. If a contractor did not support the American Plan, he could not get material for his work. All types of building materials manufactured in California and not subject to interstate commerce, such as cement, lime, plaster, brick, terra cotta, rock, sand, gravel, were placed under the "permit system."

When a contractor signed the pledge supporting the American Plan, the Builders' Exchange issued a permit which enabled him to secure materials from the jobber or distributor. The permit system was so efficiently administered that if a building

in the course of construction became unionized for even one craft, material for other crafts was withheld until the conditions in question were corrected. Over twenty thousand permits were issued. At no time were the unions able to overcome the effect of this plan, even by importing materials.[24]

The unions tried to defeat the permit system in the courts. After a long process of litigation, the Federal Court held that building materials did not lose their interstate character through warehousing; and, therefore, enjoined the application of the Permit System to goods produced outside the state, as an interference with interstate commerce under the Sherman Act.[25] The United States Supreme Court, however, on appeal in March, 1925, declared that the commodities against which the permit system operated did not come under interstate commerce, and whatever interference there was with such commerce was trivial and incidental to the main purpose.[26]

(c) *Control of Credit.* The Industrial Association denied that at any time it requested banks to withhold credit from contractors or owners who refused to support the American Plan. But since the Association made it a point to find out the credit connections of contractors and owners, the possibility of credit discrimination had much influence in keeping certain contractors in line.[27] The unions cited instances where material dealers who contracted with them for materials were threatened with financial ruin if the contracts were not canceled. Every bank in San Francisco but one contributed to the first war chest of the Industrial Association, in amounts ranging from $5000 to $25,000.

(d) *Pressure from Owners.* Employers who could not be induced, by the methods already cited, to join in the anti-union fight were brought to terms through the owners. One illustration will suffice to indicate how this control was exerted. When the large Standard Oil Building was in process of construction, the contract for plastering was given to a prominent San Francisco contractor, who later refused to employ nonunion men.

The contract had already been signed. The owners of the building and the Industrial Association gave the contractor $10,000 as an inducement to cancel his contract. It was then awarded to a contractor operating under the American Plan. This was the only instance in which a contractor was reimbursed for a canceled contract. In other instances, however, owners were induced to accept higher bids from contractors friendly to the American Plan, and the Industrial Association in turn reimbursed the owner for the difference between the two figures. Owners were solicited in advance and "sold" the idea. With the coöperation of the architects who were in favor of the new régime, the local work was "sewed up" for the American Plan. Once a contractor secured an American Plan job he assumed certain obligations to live up to minimum conditions as set down by the Industrial Association.

6. Principles of the Industrial Association

It was stated above that the winning of the building-trades strike was incidental to the larger program of the Industrial Association. This provided for the development of certain basic principles upon which the American Plan was founded:

First: The right of any person to seek, secure and retain work for which he is fitted, and the right of the employer to engage or dismiss employes should not be abridged or denied because of membership or lack of membership in any organization or association of any kind.

Second: Efficiency in industry: This should be created and maintained to enable our enterprises to cope with those of other places. Superior skill and industry in work should be permitted to earn an adequate reward. The establishment of this principle, however, is not to be used to reduce the earnings of a less able man below a fair return for the work done. No artificial limit or restriction should be placed upon the normal production of any man or upon the use of any appliances, invention, or other means to increase output, always having due regard for the health, safety and well-being of the individual.

Third: The right of management is inseparable from the responsibility for industrial results. Therefore, the right of the employer to engage or dismiss men individually on merit must not be circumscribed; the right, on all occasions, however, to be exercised upon broad principles of justice, and with the recognition of the obligation on the part of management to coöperate with the employe in securing so far as possible continuous employment.

Fourth: No understanding should be reached between employers and employes that ignores the public interest, and no agreement should be tolerated that is illegal or contrary to sound public policy, whether made between employers themselves or with their employes or others.

7. Functions of the Industrial Association

These principles placed the Industrial Association in a different class from regular employers' associations. From the very beginning this association made it clear that it would not permit union labor to continue to control the industries of the city. But it made it equally clear that employers would be prevented from exercising what they might feel to be their "newly won license instead of freedom." One of the very first complaints was against a large building-material concern which did not pay the wage scale endorsed by the Industrial Association. After a lengthy hearing, the employer was compelled to reimburse the workers with back pay.

This presents one of the most interesting problems in industrial relations, namely, the necessity of educating and coercing employers to operate under conditions recognized as "fair." New York employers, for instance, favor the closed shop because "the employers in the building industry are not educated to run their work under the open shop." In other words, where there is no union to compel observance of certain fair working conditions, competition in the industry compels employers to reduce the standards and working conditions far below those which would prevail in a unionized industry. In San Francisco the unions lost the power to determine what the conditions should be and to put them into effect. Some other agency was

essential. The Industrial Association assumed both functions — determining the conditions and putting them into effect. If an employer persisted in violating the standards, the Industrial Association sanctioned a strike against him.

The Association declared that it had no intention to smash unionism.

> If the employer regards the American Plan as a means of blackjacking the unions into submission, and a permit to revive old nineteenth century working conditions, the American Plan will . . . fail.[28]
>
> The Industrial Association has never waged war against union workmen. The Industrial Association has only waged war against the uneconomic practices, those rules and regulations which have tended to restrain legitimate business enterprises and to make more difficult business operation with sound and efficient management. The Industrial Association has never quarreled with any union . . . for the mere sake of a quarrel. It has never entered into any controversy unless convinced that under the closed shop, legitimate progress of a business or an industry is impossible.[29]

Thus an open shop was conceived in San Francisco as "a privilege which imposes obligations."

(a) *Fixing Wages — The Impartial Wage Boards.* The first and most important task of the Industrial Association was to see that some form of machinery was set up to establish wage rates. It assumed the obligation of enforcing the Arbitration Board decision which fixed wages until November, 1921. To provide a new scale after that date, the Association created an Impartial Wage Board.[30] This Board, after conducting public hearings at which appeared (unofficial) representatives of labor, the employers, and the public, fixed a wage scale for the calendar year of 1922. The establishment of the Impartial Wage Board as "a just and orderly method of procedure for fixing wage scales" was the first experiment of its kind under non-union working conditions.[31] Two sections of the Industrial Association's brief to the Board regarding wage reductions and the methods of computing wages were significant.

In considering wage reductions the Association feels that the board should keep in mind the question of the effect of the award upon the men engaged in the building industry. A fair and rightly balanced scale made effective throughout the year 1922, will tend definitely to stimulate efficiency and to establish confidence among the workmen in the right intentions and integrity of their employers. The Association feels this is vitally important at this time when the men are still laboring under the erroneous impression that their employers and the Industrial Association have conspired to destroy union organizations and take advantage of the men as regards wages and working conditions.[32]

The Board had no jurisdiction over working conditions, hours, or such questions as that of restriction of output. These were now determined by the employer and the Association. The Industrial Association was pledged to enforce the wage award made. Even union men, while strenuously objecting to the method of procedure and to the "dictatorship of the Industrial Association," were somewhat bewildered by the apparent effort to be fair.[33] The Industrial Association by enforcing minimum wages was protecting the workers against the unscrupulous employers, who might have taken advantage of the slump in building and have paid below the established minimum rates. Moreover, this stabilized wages for a period of time. In the past two or three years, however, for short periods of time, employers in several crafts have had difficulty in holding skilled workers at the wage rates enforced by the Industrial Association, which, although supposedly minimum and not standard wages, were considerably lower than in other cities.

(b) *Reducing Jurisdictional Disputes.* One of the most important reforms attempted was the abolition of the craft boundaries and the strictly defined jurisdictional lines. The Association has as yet done little along this line. In the brief filed with the Impartial Wage Board, it endorsed consolidation of several crafts on the basis of the material used. These reforms, it contended, would not only materially increase the possible number of working days for each person but would

abolish artificial jurisdictional lines. So far, nothing has been done about this suggestion. The Industrial Association, in substituting its dictatorship for McCarthy's, outlawed jurisdictional disputes by permitting an employer to use whichever worker was most competent to do the task. As one of the officials of the Association put it, "He can use bookkeepers for pile drivers, as long as he pays them pile drivers' wages." [34] However, while there has been no open consolidation of trades, the fact that the job is now completely controlled by the employer prohibits the unions from enforcing their jurisdictional rules, and many of the more costly practices of this character have consequently been eliminated. To quote the same official of the Association, "the lowly common laborer can actually handle such things as radiators and reinforcing rods; hod-carriers no longer become apoplectic if brick or hollow tile is touched by profane hands other than their own." [35]

(c) *Apprentice Training.* At first the Industrial Association gave little consideration to apprentice training; the strikes, the Impartial Wage Board and other issues consumed its time. In 1922 the Association evolved a program of training. It is interesting to note that the original pressure for apprenticeship training came during the plasterers' strike in 1922. Instead of relying upon the old-fashioned methods of recruiting a more or less undesirable class of strike breakers, the Association trained more than a thousand boys in a very short time. Though apprentice training began as a war measure to supply strike breakers, it later developed into a consistent plan to prevent labor shortage. Full-time intensive training for several months replaced the old three- or four-year term. The first 100 applicants were given the army intelligence tests, and those chosen sent to the trade schools. It was conceded that no trade school could compare with actual conditions on the job; certain rudiments of the craft, however, could be taught in a comparatively short time.

The Association also assumed the duties formerly exercised by the unions in regard to safety regulations. A safety engineer inspected all jobs and reported any violations to the Association. An attempt to inaugurate a system of group insurance was only partially successful. A free employment bureau has been another function started by the Association. The Industrial Association thus feels that it is eliminating the need for unionism in the building industry, by substituting its dictum for the "police power" of the unions.

8. Appraisal of the Industrial Association

A number of important questions present themselves in an effort to summate these activities and to appraise their worth. The first naturally has to do with the position of the labor movement. Is it possible that after a quarter of a century of domination it has been completely vanquished? How much of it remains? Also, why were the unions so impotent in their struggle against the new power? Have they succeeded in making any inroads on the power and prestige of the Industrial Association? Second, a few questions must be answered about the Industrial Association itself. Just what kind of public body is it and how much control does it exert over the entire situation? What are its limitations and how far has it succeeded in replacing unions in determining working conditions? Is there room for the unions and a public body under the American Plan? And finally, is the type of control which the Industrial Association substituted for that of unionism an ultimate solution?

(a) *Causes for Union Weakness in 1921.* At the time of the 1921 arbitration proceedings and the succeeding negotiations, the Building Trades Council showed a very definite lack of wise leadership. Its leaders were men trained in the arts of war. Heretofore, they had secured their demands by a threat of force. The situation created by the numerous incipient strikes for wage increases led to arbitration proceedings, and created

an atmosphere in which the union leaders were not "at home." As the hearings of the Arbitration Board progressed the unions showed a lack of familiarity with the methods and tactics of industrial arbitration. The technical points raised by the unions, namely, that the Board exceeded its authority in awarding a decrease in wages, had little basis of fact in the agreement. While it was true that the first case which the Board had to consider dealt with a demand for wage increases in fifteen trades and a demand for decreases in two trades, the agreement in itself was broad enough to include any issue that might be raised at any time.

At the first hearing of the Board, Mr. F. C. McDonald stated on behalf of the Building Trades Council that he would be proponent for wage increases in fifteen crafts and opponent of wage decreases in two crafts. He asked the Board of Arbitration if they understood these to be the issues and all the Board members answered in the affirmative. The representatives of the Builders' Exchange did not object to Mr. McDonald's definition of the issues in the arbitration. After the decision was given the unions presented the minutes of the hearings and the decisions to legal advisers and invariably were told that the Board did exceed its jurisdiction. Mr. Rudolph Spreckles, a prominent banker, wrote as follows to the archbishop of San Francisco, one of the members of the Board:

> I have consulted several eminent attorneys concerning the law of arbitration, the terms of the agreement under which the honorable Board acted and the general facts of the hearing, and all agree that the Arbitration Board exceeded its authority when it reduced wages in seventeen crafts. Attorneys for the Chamber of Commerce and for the Bank of Italy admitted in the hearing of the gentlemen who attended the conference called by the Chamber of Commerce on May 6th that in their opinion the Board of Arbitration had exceeded its authority. I, therefore, feel justified in believing that your honorable Board did exceed its authority.[36]

While these opinions, however weighty, encouraged the Building Trades Council in its first stand, those who followed

the history and technique of the proceedings felt that the proper time for the unions to object to the Board's jurisdiction would have been when the employers presented evidence for wage decreases. Then the Board would have had to decide the mooted question before any decision affecting wages was reached. If the Board had decided in favor of the employers on the question of jurisdiction, the unions could still have stepped out of the arbitration without violating the agreement, since no decree had yet been given. As it was, they had pledged themselves to abide by the decision. The technical objections raised against it did not seem to justify the serious consequences which followed.

All this points to something that was very obvious, namely, the inexperience of the unions in conducting arbitration proceedings. This situation was partly excusable. The unions were confronted by the first real arbitration in the history of the San Francisco building industry, and those schooled in the conventional methods of industrial conflict were not able to conduct negotiations in competition with the skilled attorney representing the employers. The unions did not know how to proceed; they permitted evidence to be presented at any time. Moreover, the manner of taking testimony and the presenting of written briefs, instead of having oral hearings only, gave them the feeling that they had been "tricked."

After the rejection of the decision and the challenge of the employers, the labor movement resorted to its old fighting tactics — this time, to protect its organization against the first general attack which had been made in more than twenty-five years. Among the rank and file, few doubted the outcome. The leadership, however, was stunned. Never before had the business interests of the community given their moral and financial support to building employers as they did in 1921. McCarthy seemed to have lost his old fighting ability. Moreover, the new conditions made the antiquated fighting tactics useless. In the past, if the unions succeeded in holding their

membership off the job, victory was merely a question of time. But a change had taken place in the complexion of the union membership and in its ability to "hold out." The new standard of living compelled the worker to meet certain fixed charges irrespective of a strike. The larger number of household and other commodities which had been bought on the instalment plan considerably reduced the workers' "waiting power." The payments must be met and the period of holding out could not be extended indefinitely.

In the past, during times of strikes, unions received the support of independent contractors. The neediest workers were thus able to secure work until the strike was won. In San Francisco, however, the independent contractors were whipped into line by owner pressure combined with the influence of the permit system. Thus the employers were able from the outset to present a united front against the union offence.

A third and inherent difficulty in the local situation arose on account of McCarthy's leadership. McCarthy and his immediate assistants had carried the brunt of all negotiations with the employers for more than twenty years. They had become skilled technicians as well as tacticians. As a result, the union leaders of the different crafts had little opportunity to develop the skill and acumen necessary in negotiating with employers. When the test came in 1921 and McCarthy failed to bring victory, a sort of hysteria overtook the union membership. The officials did not know what to do. They looked to their tried veteran for guidance, but he practically advised them to surrender. During this crucial period McCarthy did not have a unified group behind him. Since his power had been obtained and maintained through union politics, there was an immediate splitting of the union group into two factions, those who backed McCarthy in his stand and those who felt that this was their opportunity to break McCarthy's hold on the Building Trades Council. This resulted in a division of counsel. Many of the more able leaders felt that McCarthy was making a fatal

blunder in rejecting the award of the Board. This disorganized situation resulted in an immediate division of leadership, with a resulting confusion to the strike plans. At the same time a powerful "rank and file" movement made its appearance, charging the regular officers with treason, and attacking the integrity of the elected officials of the Building Trades Council and the local unions.[37] A dual organization was set up, and a movement against the leaders began. This secession movement was responsible for whatever fight was made at the beginning of the struggle. With this chaos within the unions, it was no wonder that they were demoralized quickly; and although the strike lasted for about ten weeks, the American Plan was accepted "for the time being."

We must not overlook the fact that the combination organized to defeat the unions was not only ably generaled, but well financed. The "war chest" contributed by the large business interests, the combination of the employers and material dealers, making possible the use of the permit system, the pressure from credit institutions — all combined to make the victory of the employers decisive.

(b) *Failure of Unions to Regain Control.* At the present time the unions in the building trades seem to be at a loss as to what tactics they should pursue in combating the Industrial Association. And here we find the curious effect which a position of compromise has on an opponent. If the Industrial Association had openly attempted to destroy the unions — drive them out of the industry — and had proceeded to do so with the rough methods used in other open-shop cities, it would have been less difficult for the unions to maintain their organizations and defeat the Industrial Association. In a clear-cut fight, in a struggle for existence, the unions might even rally the community to their side. But the position of the Association was not one of union smashing. It "encouraged" the unions to recruit membership. It "disciplined" employers who refused to pay minimum wages. It "legalized" strikes against employers who

violated working conditions decreed by the Association. Union business agents and members were "invited" to bring complaints and "confer" with the Industrial Association in regard to conditions. These tactics, on the surface at least, did not appear to be "union smashing." However, they had identical effects, in that they broke the morale of the union men and discouraged allegiance and dependence on the union.

(1) *The bricklayers' strike.* A number of attempts to revive union solidarity and to overthrow the Industrial Association have been made in the past seven years. In March, 1922, during a period of acute labor shortage in the trade, the bricklayers struck to enforce the closed shop, on the ground that their by-laws prohibited them from working with nonunion bricklayers — although they had been doing so for seven months. The Industrial Association began to recruit strike breakers. Several large employers were ready to sign the union agreement, but the Association agreed to share the losses which the master masons would suffer as a result of the strike. The defection in the ranks of the employers was thus prevented, and the American Plan continued. After eight or nine months, union bricklayers returned to work as individuals. The union never took a formal vote to call off the strike, and soon union and nonunion bricklayers were again working side by side. Since then there has been a good deal of guerilla warfare, but at no time has the union rallied sufficiently for another attack on the employers' position.

(2) *The plasterers' strike.* Three weeks after the bricklayers struck, the plasterers' union took similar action, giving a few hours' notice. The regular procedure of recruiting nonunion workers and training apprentices followed, and the strike might easily have been overcome had the master plasterers supported the American Plan. The larger plastering firms had always operated on a strictly union basis, and opposed the adoption of the American Plan much longer than the other employers did. In fact, they were not converted to the program of

the Industrial Association until long after the American Plan was an accomplished fact in practically all other crafts. When the plasterers' union, therefore, challenged the American Plan contractors, many employers in the trade swung their support to the union. No agreements were made, but there were oral understandings to employ union men only. The union supplied them with materials which they secured from a union material-supply house organized in San José to fight the American Plan there. General contractors were unable to get their work done by the few small subcontractors still loyal to the Industrial Association. They suggested that open-shop contractors be brought in. After all other means had failed the Association organized a plastering company in which the only stockholders were five of the largest general contractors. It confined its work exclusively to the jobs of those contractors. Soon owners canceled their closed-shop contracts at a loss and turned their work over to American Plan employers.

By the end of November the Association got control.[38] It had imported many strike breakers and trained many apprentices; the union members were out of work. The plasterers tried to negotiate, but were answered in the same manner as the bricklayers had been: No discrimination would be shown, organizing campaigns would not be opposed, but the men brought into the city would not be discriminated against, and union and nonunion men must work together. A few days after this conference, the union voted to return to work under the American Plan. The vote was a surprise to all. The plasterers' union was one of the strongest in the city. The international officers of the union arrived and the local rescinded its vote on February 1, 1923. The strike was on again. But by this time the Industrial Association had underwritten the losses of the plastering contractors, and these solidly supported the American Plan. The union voted again to return to work and the international union revoked its charter.

(3) *Other efforts — the carpenters' strike.* About the same time, the plumbers struck, with as little success. On April 1, 1926, the Brotherhood of Carpenters decided to make another test of the power of the Industrial Association, and called a strike on all jobs where nonunion men were employed. After nine months the carpenters went back to work without having achieved their aim — that is, the closed shop. However, the strong stand made by this union and the long period for which they were able to hold out somewhat surprised the leaders of the Association. This contest, doubtless, was directly responsible for the increase in wages to the carpenters in December, 1926, and the settlement of the strike was made as a result of direct negotiations between union officials and those of the Industrial Association. With the exception of these four attempts, made by the bricklayers, plasterers, plumbers and carpenters, the building trades went through a period of seven years without a major disturbance.

It must not be inferred that the union membership was materially reduced during all these events. At the present time, while authentic figures are not available, it is safe to estimate that from 60 to 65 per cent of all workers in the San Francisco building industry belong to the trade unions. But the mere fact of membership should not conceal the more important fact that the union, as a union, has no control over the job and has no voice in the determination of wages and working conditions.

(c) *The Association not a Permanent Solution.* The Industrial Association continues in complete control. Financially it is on a sound basis. The original contributions totaled $1,250,000. Sometime later, all contributors were asked to give 60 per cent of their original contribution. Besides these donations the permanent membership and regular income are very substantial, and the Association is one of the best-supported organizations of the sort in the country. In analyzing its contribution list one is impressed by the fact that a very large proportion of the money came from large business organizations who could

hardly be impartial. A total of 1620 individuals contributed to the original fund. However, more than half the amount was raised among 65 contributors — firms or individuals. Twenty-four contributors gave more than ten thousand dollars each, while the large business interests of the city and state gave from ten to thirty thousand each.[39]

The influence of this organization in the community and business life of the city is tremendous. Thus far it concentrates its attention on the building trades, but efforts are being made to place other important industries in the city on the same basis of employment.[40]

The question arises: Can a public body not directly engaged in the building industry occupy an *impartial position* and act fairly to labor and employers? A close observation of the conditions in San Francisco leads to an emphatic negative answer. The public purpose and good intentions of the Association may be conceded. But its very nature aligns it on the side of the employers. It was born to defeat the unions. Its work has been primarily to recruit and protect strike breakers, and to reimburse employers for losses incurred during strikes. A number of times, when the Industrial Association attempted to make significant changes in the wage scales in order to grant justifiable demands to certain trades, its efforts were successfully opposed by the employers. Thus in 1925, an upward revision in the wage rates of several crafts proposed by the Association was rejected by the contractors. The point might well be raised that, since the ability of the Association to hold its own against employer opposition had already been tested severely in several clashes with the contractors, it should have insisted on such revision, in view of the general recognition that the wage rates then prevailing in San Francisco were low. But the Association has found it necessary to be hesitant about forcing contractors to adopt policies which they oppose.

Many members of the Builders' Exchange resent the active rôle which the Association is playing in the building trades, and

feel that the actual determination and enforcement of industrial relations policies should be left to the organization whose members are directly engaged in the building industry — the Builders' Exchange. They feel that the Industrial Association should have the right to come into the picture only when the Exchange finds itself in difficulty — should confine its work to militant action. A minority of the members in the Exchange are opposed to the American Plan as administered by the Association. These favor the closed anti-union shop. Mr. W. L. George, President of the Builders' Exchange, for example, answering the question, "Do you believe that the American Plan is a solution of the present situation?" summed up his reaction to the work of the Association as follows:

> I do not. I have never been in favor of the American Plan since it started. You cannot mix water with oil. The employment of union and nonunion men on the same job leads to constant bickering and warfare. In my plant where I employ more than 250 workers, I hire nonunion men only, and if occasionally I hire a man with a card, I have a special man watch him and as soon as he indicates the slightest tendency to proselyte, he gets out in one moment. Similarly in the building trades of San Francisco. The solution is a closed shop against union men; the employment of nonunion men only, and when that period is reached we shall defeat the unions. Under the American Plan of employment the union keeps up a constant warfare, the present carpenters' strike is only one illustration.[41]

The Association has thus far succeeded in controlling the employer who favors the total elimination of the union from the building industry. It is probably true that a major portion of the members of the Exchange recognize the advantages of the Association program in protecting their rights and interests. Undoubtedly if the minority opinion, as expressed by the President of the Builders' Exchange, were to control the policy of the Industrial Association, the position of the labor movement would be considerably strengthened. Once the issue became clearly defined as a contest against unionism, rather than

against the abuses of union control, the labor organizations might even regain their former strength.

Moreover, the Industrial Association operates under very definite limitations. While it is indirectly responsible for the determining of wages and for establishing other rules, it has no effective means of enforcing such orders. Its corps of inspectors is always inadequate. Only the most flagrant violations come under its purview. The Association must depend on the voluntary assistance of the unions in policing the job. Although not dependent exclusively upon this source of information, it could not, without the aid of the unions, maintain the minimum standards which it has established. The Industrial Association seems to have taken advantage of the opportunity to use the unions as "job stewards." The unions complain to the Association and the latter chastizes the employer if it sees fit. The position of the union is not unlike that of the minority party in a government. Its function is to spy on industrial conditions and, on any violation of the code of conduct, to make a protest to the party in power. Without the unions the Industrial Association has no means of enforcing its dictum, except through the permit system.

At the same time it is obvious that under present conditions the unions have no means of securing an observance of wage and working conditions without the Industrial Association. Since the labor organizations are totally deprived of the right and power to determine the working conditions which are to govern in the industry, they must rely on the fairness of the Industrial Association in enforcing its own standards. These standards are the only guarantee which the unions have against wage cutting by employers and against efforts by the workers to undermine working conditions. One union, at least, has seriously considered fining any members who accept employment at rates lower than those set by the Industrial Association Wage Board. It is doubtful, however, whether the unions would willingly consider the acceptance of any program which

looks to the "recognition" of the Industrial Association; much less, to accepting its standards of wages and working conditions. Without union aid in the enforcement of standards, the Association must rely on educating the employers to observe its program. And if the employers refuse to be educated, the permit system can still be used to force them to preserve American Plan conditions. But this weapon could not be used successfully for an indefinite period of time. The employer once more appears as the crux of the problem. The agency which can really control, the union, is eliminated, and no effective substitute is provided.

(d) *Absence of Collective Bargaining.* It is not profitable to define collective bargaining too meticulously. It is sufficient if there is some agency for joint relations, if some recognition is given to the organizations of workers and employers. What particular form this may take, whether agreements are written or oral, makes little difference. In any particular city local conditions, economic history and leadership all influence the nature of collective bargaining. The rudiments of this were present in San Francisco before 1921, and employers could have used such machinery had they banded themselves together. After 1921, the Industrial Association, organized ostensibly to maintain a balance of power between the employers and the unions, virtually destroyed the effectiveness of the central union organization without improving the organizational unity of the employer.

Not only have the workers been deprived of all opportunity of being represented in the councils of the industry and of having a voice in determining working conditions, but the virility of many employers' organizations has been reduced by the activities of the Industrial Association. Not a single contractors' organization in San Francisco today is as strong as it was seven years ago,

and many of them are only shells of the older groups. After six years of the American Plan as administered by the Industrial Asso-

ciation, the Master Plumbers' Association is only now just beginning to become a counterpart of its old self. The Master Plasterers' Association is in such a low state that it cannot longer employ a paid secretary; the marble men are shot to pieces and the same is true as to the ornamental iron shops.[42]

The sheet-metal employers are about one half as strong as before the 1921 trouble, and the electrical contractors are in the same condition. Even the Builders' Exchange is probably less powerful today than it was eight years ago. Only the Industrial Association is more powerful, has a larger membership and exerts a greater influence.

Since it is inconceivable that collective bargaining has been forever eliminated from the industry, the weakening of the workers' and employers' organizations will make a return to normal relations more difficult. The workers' and the employers' organizations are deprived of the right to conduct joint relations on the basis of collective contracts freely arrived at. Collective bargaining is to be permitted only under the supervision of the Association, that is, only on the basis of the American Plan.[43] All agreements calling for the closed shop or for other conditions which the Association feels are contrary to the public interest, are not permitted.

Only on this basis, will the Association permit a resumption of joint relations. Barring the acceptance of this program by the unions, the Industrial Association will not deal or allow employes to deal with the accredited spokesmen of the labor unions. Its program is based on the assumption, real or fancied, that only a minority of the contractors want a return to a closed-shop industry, and these only because they feel that the union will assist them in overcoming their own managerial and technical incompetence. Thus, in the carpenters' strike of 1926, the Association reaffirmed the accepted policy in regard to the nature of collective agreements.

The Association will stand by its pledge to represent the public interest, and *if any group of building trades employers attempt to make*

an arrangement or an agreement with the unions requiring all mechanics to have a union card, the Association will oppose such arrangement, because the public of San Francisco has made it clear that the building trades must never go back to the closed shop basis.[44]

As a result, the building-trades unions of San Francisco have been emasculated and the continuance of the American Plan might even wipe them out. And we have seen that the employers' organizations might suffer a similar fate.

If the Association had developed its original program of maintaining a balance of power between two equals so as to strengthen the employers and temper the power of the unions, its efforts would indeed have been commendable. The policy of the Association, however, has been to establish what it calls a "benevolent individualism." In carrying out this policy it has consciously or unconsciously used the American Plan to crush unionism and to destroy whatever the organized labor movement had gained through many years of effort.

(e) *Some Contrasts.* The present situation in San Francisco stands out in sharp contrast to the conditions prevailing before 1921. The success of the Association is singular in a number of respects. Although the initiative and directing control in determining wages, hours and working conditions is no longer directly with the employers but is vested in the so-called public body, the employers in the building trades still have complete freedom in conducting their business. In many instances the Association was able to prevent abuses, but could not foist its ideas of fair treatment and "sound relations" on the employers. In practice its control worked out to the benefit of the employers, and in many respects, certainly on the issue of union relations, it became their direct ally. Its first success may, therefore, be said to have been in vanquishing the unions.

The Association has been able to keep the building industry free from anti-public collusive arrangements among contractors or between contractors and labor organizations. Credit is also claimed for the fact that since 1921 the building industry has

been a relatively strikeless industry. The four stubborn efforts to overturn the American Plan must not be overlooked, however. Each one resulted in a costly strike which interfered with building operations to a considerable extent. And it is too much to expect that the unions will accept the new régime willingly. Guerilla warfare and strikes will continue to test the power of the Industrial Association. Moreover, San Francisco

TABLE XXIX

COMPARISON OF UNION WAGE SCALE AND AMERICAN PLAN WAGE SCALE IN SAN FRANCISCO

Average Wages per Day

Trade	Union Wage Scale				First Arbitration Board	American Plan Wage Scale		
						Impartial Wage Board		
	1914	1918	1919	1920	1921	1922	1926(*a*)	1927(*b*)
Bricklayer	$7.00	$8.00	$9.00	$10.00	$9.25	$9.00	$10.00	$11.00
Carpenter	5.00	6.42	7.67	8.50	8.35	8.00	8.00	9.00
Cement Finisher	6.00	6.95	8.42	9.00	8.35	8.00	8.50	9.00
Electrician	5.00	6.25	7.58	9.00	9.25	8.00	8.50	9.00
Laborer	2.50	3.87	5.42	6.00	6.00	5.00	5.50	5.00
Lather (wood)	6.50	6.87	7.75	9.00	9.25	8.00	8.00	8.50
Painter	4.50	6.04	7.75	9.00	8.35	8.00	8.00	9.00
Plasterer	7.00	7.87	9.00	10.00	10.20	10.00	10.00	11.00
Plumber	6.00	7.42	8.50	10.00	9.25	9.00	9.00	9.50
Sheet-Metal Worker	5.50	6.75	8.42	9.00	9.25	8.50	8.50	9.00
Structural Iron-worker	6.00	7.00	7.42	8.50	8.35	9.00	10.00	11.00

(*a*) The Impartial Wage Board was originally appointed by the Industrial Association in 1922, to set a wage scale which was to become operative when the scale set in 1921 by the Arbitration Board expired. The Wage Board was not called into session between 1922 and 1926, but its wage scale was reaffirmed from time to time by the Industrial Association and the contractors' organizations. It is interesting to note that the 1926 scale was reaffirmed by the employers over the protest of the Industrial Association, which favored an upward revision for some trades. But, while "official" wages were not changed between 1922 and 1926, actual wages fluctuated above the Wage Board's minima. Thus, while the actual rate set for bricklayers for 1926 was $10 per day, it is known that bricklayers were more likely getting $11 daily during the busy months of the year. Similarly, the average actual wage for carpenters was considerably in excess of $8, probably nearer $8.50. The discrepancy between the "official" rate and the actual rate was particularly true for plasterers, who were probably getting at least $11 per day between 1922 and 1926 — for a portion of this period they were getting $12 per day.

(*b*) The 1927 scale was established in December, 1926, and in some instances represents actual increases; in others, an affirmation of going rates which were in excess of the published rates. This upward revision was secured against the wishes of the employers, largely as a result of pressure by the Association, and is recognized as a tardy adjustment in the wage situation.

TABLE XXX

COMPARISON OF MAY, 1927, UNION HOURLY WAGE RATES IN SEVERAL CITIES FOR SPECIFIED TRADES WITH THE INDUSTRIAL ASSOCIATION IMPARTIAL WAGE BOARD RATES PREVAILING IN SAN FRANCISCO, 1922-1927 (*a*)

	San Francisco		Average Rate of Wages per Hour for Country as a Whole	Chicago	Boston	Buffalo	Cleveland	Denver	Seattle	Detroit	Indianapolis	New York
	1922–26	1927										
Bricklayer	$1.255	$1.375	$1.603	$1.625	$1.40	$1.50	$1.50	$1.50	$1.375	$1.575	$1.625	$1.75
Carpenter	1.00	1.125	1.311	1.500	1.25	1.125	1.375	1.125	1.125	1.15	1.10	1.50
Elevator Constructor	1.08	1.25	1.433	1.575	1.33	1.35	1.525	1.375	1.25	1.51	1.41	1.50
Painter	1.00	1.125	1.349	1.50	1.25	1.125	1.25	1.25	1.125	1.25	1.150	1.625
Cement Finisher	1.06	1.125	1.379	1.50	1.375	1.125	1.25	1.25	1.125	1.375	1.100	1.50
Plasterer	1.25	1.375	1.628	1.50	1.50	1.50	1.625	1.50	1.375	1.625	1.55	1.75
Plumber	1.125	1.1875	1.401	1.50	1.25	1.375	1.50	1.375	1.25	1.50	1.42	1.50
Sheet-Metal Worker	1.06	1.1125	1.330	1.50	1.25	1.10	1.376	1.25	..	1.25	1.15	1.50
Structural Ironworker	1.25	1.375	1.414	1.50	1.25	1.25	1.50	1.25	1.125	1.375	1.40	1.75
Lather: Metal	1.00	1.063	1.412	1.625	1.375	1.375	1.625	1.375	1.25	1.625	1.30	1.750
Wood	....	9.35	....	..	..	..	..	..	..	..	..	..

(*a*) *Union Scale of Wages and Hours of Labor*, United States Department of Labor, Bureau of Labor Statistics, Bulletin No. 457, 1928, Table I, pp. 3–5 and Table VIII, pp. 18–53; also published Wage Rates of Impartial Wage Board, Industrial Association, 1926.

always had a relatively strikeless building industry. McCarthy's dictatorship controlled the unions and prevented spasmodic strikes. Neither can the Association take credit for eliminating strikes caused by jurisdictional disputes, although it did succeed in removing from the industry many objectionable jurisdictional rules. But jurisdictional strikes were never a very serious problem in San Francisco. Here again, McCarthy's discipline reduced the hazard of jurisdictional disputes to a minimum. Nor is the claim justifiable that since the American Plan was instituted the amount of building in San Francisco has increased. As a matter of fact, the building boom was long overdue. Other cities working under closed union-shop conditions had similar if not more spectacular developments.

On the other hand, one must not overlook the complaint of workers that the Industrial Association has maintained a wage scale lower than that of any closed-shop city in the country. In fifteen crafts in San Francisco up to 1927, the wages have decreased since the advent of the Association, while in all union centers wages of building trades have increased.[45] Not only was the wage scale for all trades prevailing in 1926 lower than the last union scale of 1920, but, with the exception of two trades, the prevailing wages in 1926 were even lower than the rates established by the First Arbitration Board in 1921. The building-trades workers in San Francisco are at a disadvantage compared with those in other cities. For all ten trades compared in Table XXX, the San Francisco wage rates for 1926 are lower than the average rate for the country as a whole. When comparisons are made with wages in nine other cities in 1926 San Francisco workers prove to have a lower wage in almost all instances. The wage adjustment made in 1927 only partly improved their condition and is recognized by all groups, including the Industrial Association, as a tardy recognition of an unfair situation. Tables XXIX and XXX, respectively, compare (a) the wage rates in San Francisco since

1921 with the union wages before 1921, and (b) San Francisco wage scales in May, 1927, with the scales prevailing in several other cities.

The origin, program and activities of the Industrial Association will long be remembered as an outgrowth of union dictatorship. But grave doubts prevail as to whether it is a constructive solution of the problems constantly arising in the industry. Suspicion of its policies and of its real intention is ever present; and as long as it refuses to accord group recognition to the organized workers in San Francisco opposition to its program will not subside. There is need for an organization representing the public in the building industry, whose task shall be to prevent anti-social agreements. But such a program must not take away the control of the industry from those directly engaged in it or it will, as the Industrial Association appears to have done, simply substitute one dictatorship for another. From this point of view the San Francisco experience is a lesson in dictatorship. Its limitations as a form of industrial government will be treated in another chapter.

CHAPTER XV

THE ORGANIZATION OF EMPLOYERS IN THE BUILDING INDUSTRY

WE HAVE already seen that trade unionism became a prominent factor in the building industry long before the beginning of the present century. The movement started with trade or craft unions in the different branches of the industry. It was soon followed by effective city central organizations known as building-trades councils. It culminated in the establishment of aggressive national trade unions in every branch of the industry, and finally, in 1908, in the combination of these national trade unions into a federation of building trades. Since that time the building-trades unions have been strengthening their organizations through great accretions in membership and through amalgamations which have reduced the number of unions and the friction between them.

The employers in the building industry, however, are about thirty years behind labor in terms of organization. They have not yet developed a single effective national organization. In only a few localities have they established strong central organizations corresponding to the building-trades councils. The development paralleled that of the unions; local trade organizations of contractors were first amalgamated into city employers' associations and then into national trade associations. But they have achieved little success in securing coöperation of these groups in dealing with labor relations.

What are the reasons for the relative weakness of employers in the building trades? What obstacles stand in the path of organization? Where the employers are organized, what methods do they adopt and to what extent have these succeeded? And finally, what limitations to stable industrial relations are presented by the unorganized building employers?

1. Difficulties in Organizing Employers

A number of conditions in the building industry prevent effective organization of contractors into an employers' association for the purpose of dealing with labor problems. These conditions concern, first, certain economic characteristics of the industry;[1] second, the economic and bargaining position of contractors; and third, the attitude taken by the owner, architect and banker. The number of contractors in the various trades is so large that it is difficult to include a major portion of them in a stable organization. This condition is the chief cause for the weakness of the employers' organizations. The small amount of capital required to enter the industry, the ease with which one can acquire the knowledge needed to manage a specialized fraction of a trade and the methods by which these small contractors conduct business hamper an organization of employers. The "basket contractor" of the electrical trade (so-called because his total capital of tools can be carried in a basket), the fly-by-night contractors, the speculative builders, the unscrupulous and incompetent contractors in many branches of the industry — these form a part of the background from which employers' organizations must secure recruits.

There is a constant shifting in the employing personnel of the industry; contractors going from one branch to another, subcontractors becoming general contractors. Recently the "broker" contractor has become important. He does no work and knows no trade, but sublets every part of the work to subcontractors. Moreover, the interests of the general contractor and the specialized subcontractor differ, and are often antagonistic. Sometimes problems of competitive practices and contractual terms overshadow in importance those of labor relations. The absence of homogeneity in interests and in stability prevents the effective functioning of employers' organizations.

The position of the owner in the construction industry has

already been described. Here it is of importance to stress that the owner is interested in the building industry only while his building is being erected. He is not interested in the closed shop, or in union working conditions, nor is he primarily interested in low wages. His concern is to have the building completed, and if that can be done sooner or more cheaply under a closed shop than with an open shop, he has no aversion to the former. The average building owner is not altruistic enough to make his building site a battle ground upon which principles of industrial relations may be decided. Principles do not necessarily bring profit, and, when the former are obstacles to getting his building completed, the owner refuses to support the contractor. This psychology is thoroughly understood by the building contractor and is responsible for much of the lethargy which he exhibits toward organizing activities. The cost-plus contract is one way in which the builder attempts to protect himself, by making the owner bear the burden of existing conditions and the risk of changes which may increase the cost during the period of construction. The builder, therefore, finds it more expedient to adopt a policy of concession and compromise in labor matters.

The early start made by labor in organizing the industry makes it more difficult for employers to organize now, either for the purpose of sharing control or wresting control from the unions. This, in addition to the other obstacles, explains why the contractor lags behind in organization activities unless supported by the banker, material dealer or public.

2. Local Organizations of Employers

(a) *The Early Builders' Exchange.* One of the first forms of contractors' organizations was the builders' exchange. Those engaged in carrying on the several branches of building

found it convenient to assemble at a regular and common rendezvous to consult together as to the details of the work in which they were mutually engaged, secure estimates from each other for pro-

posed work, and to attend to other matters incident to their undertakings more expeditiously than by attempting to find each other at shops or places where the work was being conducted.[2]

Few "mechanics," as they were then called, had offices. Those whose work required, had shops, but the large majority made their homes their offices.

Every city of any importance had a builders' exchange. This was in the days before the telephone. It was a difficult task for a contractor to secure bids for a project from subcontractors unless the business was carried on by mail. The "exchange" filled the need for communication. It offered an opportunity to develop a common interest in building-trades problems. Although it brought contractors together, it also brought in heterogeneous groups of manufacturers, dealers in materials and equipment and subcontractors of all trades — in short, a group which was not homogeneous in its interests.

(b) *Master Builders' Associations.* While these exchanges provided many advantages, by the very nature of their composition they could not concentrate on labor problems. Large contractors, therefore, broke away from the exchanges and formed separate organizations which specifically represented their trade interests. Such an offspring was the Boston Master Builders' Association (carpenters and masons), organized in 1871 by a few dissatisfied with the management of the Builders' Exchange. Builders' associations in other centers followed. As a rule, however, contractors retained their membership in the exchange for other purposes, but relied on their own trade organization to handle labor questions. Subcontractors were organized into separate trade associations.

Historically, the first associations of contractors were those organized to regulate competitive practices among themselves. Labor questions were discussed when necessary, when union demands for improvements in conditions or for written agreements came up. Often, the first impetus to organize was given by a labor strike, but when the emergency was over, labor ques-

tions were superseded by those relating to competition and business methods.

In New York City, for example, in 1884, the mason contractors formed the Master Builders' Association to deal with the bricklayers strike then in progress. This association aimed to avoid strikes by substituting arbitration. A few years later the master carpenters of New York City organized. By the time the 1903 strike took place, there were thirty employers' associations in that city. In Chicago there was a similar number when the 1900 lockout began. In both these cities the movement for local organization came as a result of union activities and demands.

Trade agreements were effective only as long as the trade unions were willing to abide by them. The success of the New York Mason Builders' Association in maintaining joint relations with the bricklayers' unions was due largely to the arbitration policy adopted. The New York bricklayers were not affiliated with the central organizations of the unions, and they did not participate in sympathetic strikes. Many of the employers' trade associations had no agreements but simply "lived up" to union conditions — that is, paid the union wage scale, worked the hours set by the union and acquiesced in the union rules. The power of the labor unions was attained during this period, when the only form of employers' organization was the trade association of contractors with no central affiliation. Sam Parks, Martin B. (Skinny) Madden and P. H. McCarthy were products of this era.

(c) *The Building Trades Employers' Association.* It is possibly no exaggeration to say that the unorganized individual employer in the building trades was at a greater disadvantage in dealing with the union than the unorganized worker in his relations with an employer. An independent contractor met tremendous obstacles if he attempted to oppose a union federated with a city central organization. Even the separate trade associations of contractors were impotent if the combined

unions wielded the weapon of the sympathetic strike. As a result, the movement to parallel the central organization of local unions began. By 1910 effective building-trades employers' associations, centralized to handle the labor problems for all the contractors and, in the main, organized exclusively for the purpose of dealing with unions, existed in the important building centers. Some of these date back to the beginning of this century and others claim continuous existence for more than two decades. The Contractors' Council of Chicago was organized in 1899. In power and effectiveness it was at least equal to the Chicago Building Trades Council, organized by the unions in 1890. The Building Trades Employers' Association of New York was formed in 1903 and has maintained a continuous existence since that time. While the federated employers in other cities have not achieved the success of these two bodies, since 1910 most of them have been able to maintain their associations and unify the labor policies of the affiliated organizations.[3]

3. National Employers' Associations

A quarter-century ago a contractor did not need to affiliate with a national organization. The problems were distinctly local. The unions were primarily local unions. There were national unions, it is true, but those cognizant with conditions will concede that these had little power over their local affiliations. National unions, at that time, sought to bind the workers together for fraternal purposes, and also, where possible, for purposes of administering national problems. But in the building industry, at least, they had very little influence on local strikes, local agreements and local organizations. The same local factors which mitigated against strong national unions hampered the organization of effective national contractors' associations. Since 1900, however, significant changes have taken place in the building industry. The large contractor, with operations extending from coast to coast, has come into

prominence; the greater mobility of labor threatens the local labor monopoly; jurisdictional disputes have assumed national importance; and national unions have assumed greater control over the activities of local unions. When these changes began to exert their influence on the local labor situation, many contractors saw the need for a national organization to correlate the activities of local groups, and conduct organizing and educational campaigns among employers in unorganized territory.

(a) *The National Association of Builders.* One of the first successful attempts to organize the employers on a national scale was made more than forty years ago. The National Association of Builders was formed in Boston on March 30, 1887. It began with a representation of local builders' exchanges from ten cities, and within four years the number increased to thirty-five. Although the presence of diversified local interests injected by local exchanges was a decided weakness, the organization prospered for some years. The history of this first effort illustrated clearly the difficulties of organizing building-trade employers on a national scale.

The National Association of Builders dedicated itself to the task of aiding and maintaining the "independence of employer and employe, as against any and all organizations antagonistic thereto." It asserted that "freedom to work under private contract must be as fully recognized as freedom to worship." [4] There was sufficient reason to announce this purpose. After 1885 the unions, particularly in the carpentry and masonry trades, began to aspire to a certain type of job control, later described by the term "closed shop." The unions were also learning the value of the sympathetic strike. The increasing power of the business agent was making itself felt and was responsible for a resolution that "the word or signal of the delegate tyrant who commands thousands to stop work must be consigned to the tombs of the dead." [5]

The president of the Association reporting to the 1888 convention concluded that their activities were already bearing

fruit. He said: "There seems to be hesitancy on the part of labor organizations to advance with such effrontery as before the establishment of our body and the announcement of its principles." [6] The national organization participated actively in the local struggles of its members and supported the Chicago contractors in the long strike of 1887–88.

During the first five years the Association made gradual progress and did some necessary educational work among employers as to the value of organization. By 1892 it claimed a membership of over 3500 firms.[7] However, the depression of 1893 wiped out a large number of local exchanges, with a corresponding loss to the national organization. During 1894 eight local bodies withdrew their affiliation, leaving the Association in a very weakened condition. Although there were thirty-six national trade associations in the building industry, and 329 local exchanges, interest in the national body waned. Its recommendations were disregarded, and arbitration, its pet measure, made no headway. The convention of 1895 faced another loss of one-third of the membership. Consequently, it had to increase its per capita tax to finance the little work it was still doing. In 1898 there was not sufficient interest among the remaining members to finance a convention. One met in 1899 with delegates from only nine cities. It abolished all salaried officers and all publications involving expense. The executive committee was given power to use its discretion in further work.

Any appraisal of the National Association of Builders must take into consideration the conditions under which it operated, and judge the results in the light of the task it set out to perform. The Association recognized the slow and educational nature of its work in eradicating customs and practices of long standing. It aimed to unite all organizations of building employers into one advisory body; to formulate general principles of conduct for the guidance and protection of all concerned; to educate the whole building fraternity to higher levels of activity, to the end that honorable methods and practices and

sound business conditions might prevail. The organization performed a number of valuable services to the industry. It focused attention upon the need of a uniform contract, upon standardizing specifications and practices and upon developing a code of ethics. The life of the Association was too short to bring any of these programs to fruition, but the activities then begun made the task of later organizations easier.

Fundamentally, the failure of the National Association of Builders was due to two causes. The most important was its labor policy. The Association embodied in its principles the American tradition of freedom of contract and consistently defended the rights of the individual employer against any encroachment by the labor union. There was little dissent from this program; no doubt a large majority of the members approved it. However, a large portion of the Association membership was in New York City and Chicago, where unionism was making considerable headway. These local exchanges could not carry out the principles of the Association. Union regulations, apprenticeship rules and activities of business agents were all in violation of the "employer's inherent right to run his own shop." But the Association refused to compromise or deviate from its inflexible position. It was much easier to defend the open shop in those days; the closed-shop habit in the building trades had not yet been established. In convention, members pledged themselves to support the general principles of industrial freedom, while in their home centers they accepted what was economically more expedient.

Another phase of its labor policy was the arbitration program. In its first five conventions, the Association went through a fierce struggle on the question of adopting such a program. The special committee formulating the arbitration scheme urged that a joint arbitration committee of employers and workmen be created in each locality to eliminate strikes and lockouts. This was inferred by some to mean that unions would be recognized, and that such questions as the closed

shop, apprenticeship rules and the power of "walking delegates" would be submitted to arbitration. But the Association declared these issues were "not subject to arbitration."

It conceded that on many occasions labor unions might be helpful and should be consulted, but insisted that on fundamental questions arbitration was useless. The Association never changed its attitude on this issue. Its secretary, William Sayward, whose ardent labors nurtured the Association for more than ten years, was opposed to the exclusive and monopolistic principles of unionism. The issue came up in connection with two questions. One was the closed shop — this was staunchly opposed as contrary to the fundamental principles of the organization. The other was apprenticeship — this, the Association insisted, was a matter of concern only to the employers. This uncompromising attitude was in the end responsible for its failure.

The composition of the local builders' exchanges was such that a consistent and uniform labor policy even for one locality was impossible. To force a national policy upon local organizations with diverse interests was unwise. In many cases the interests of the local exchanges were far better served by adopting a policy contrary to that of the national organization. Yet, in many respects the National Association of Builders was the most successful attempt to organize building-trades employers on a national basis. It was the only national federation of contractors' associations which took a definite stand on the labor problem. Its successors, with few exceptions, evaded this issue because they were aware of the difficulties involved.

Many years were to elapse before the next attempt was made to organize the building-trades employers on a federated basis. In the interim other important developments were taking place. We have already seen that very early in the history of local organizations of building-trades employers, the most common form taken was an organization of employers in one craft. Then these individual craft associations formed a national

trade association of subcontractors. Before 1910 there was a national trade association for almost every important craft in the industry. Some of these have a long history.

The National Association of Steam and Hot Water Fitters, for example, was organized in 1888. Its local affiliations are master plumbers and steam fitters who have local agreements with the plumbers, and steam fitters' unions. The national organization does not concern itself extensively with labor problems, but concentrates on questions of business practices, contract forms, bidding methods and estimating costs. It acts as a clearing house for information concerning trade matters. The national association deals with labor questions only when an emergency arises.

In the same national organization may be found contractors from Detroit who operate open-shop and contractors from New York where the employment policy is based on a closed-shop agreement. To provide for both and keep the association intact, either vital union issues must be disregarded or the structure of the association must make room for both open-shop and closed-shop contractors. The latter object is achieved by permitting the organization of both "open shop sections" and "union shop sections" within the same organization. This device has been adopted by a number of associations in the building industry. The Association of Electragists (electrical contractors and dealers), for example, provides for both types of membership through the following sections in its constitution.

> Such members as so desire may form a section of this Association for the purpose of making contracts or agreements, or conferring with labor unions, but the business of such section shall be confined to labor matters. It shall be known as the Union Shop Section.
>
> Such members as so desire may form a section of this Association to operate upon open or non-union shops. The business of such section shall be confined to labor matters. This shall be known as the Open Shop Section.
>
> In the conduct of labor matters the Open Shop and Union Shop Sections shall enjoy complete autonomy.[8]

Each section is financially self-supporting. The Union Shop Section of the National Association of Electragists' International is operating on the basis of a national agreement with the International Brotherhood of Electrical Workers.

(b) *The National Erectors' Association.* One of the most successful associations of employers in the building industry is the National Erectors' Association. The largest fabricators and erecting concerns in the country are members of the Association, erecting a good portion of the structural steel used in the building trades. In its structure and program this organization differs from others in several respects. "The members are not held by bonds or any other forfeits or penalties to any given course of action. No members are wanted except those in full sympathy with the policy of the association, and these do not need to be held in line by restrictions." [9] It is most militant and aggressive, and exemplifies an employers' organization which concentrates all its energy on labor questions; in fact, it was organized to deal with that problem only, and has scrupulously avoided taking on any other activities. It may, therefore, be called a pure employers' association.

The success of its methods deserves some extended treatment. Before 1906 the iron-erecting industry in this country was dominated by the Structural Iron Workers' Union. For a number of years after the organization of the iron erectors in 1903, the Association had no written constitution or by-laws and its form of organization was exceedingly loose. Since its members carried on work over a wide territory, it was deemed expedient to have a national agreement with the ironworkers' union, recognizing uniform conditions throughout the country but fixing wages according to local conditions.

Following a series of disputes with the American Bridge Company, the largest steel erector and fabricator in the country, the national union of ironworkers declared a strike against this company and its subsidiaries. It was as a result of this strike that in 1906 the National Erectors' Association changed

its policy from that of a negotiatory association organized primarily for joint relations with the ironworkers' union to that of a belligerent association dedicated to the maintenance of the open shop in the iron-erecting industry. Since then the membership has been restricted to those firms which pledge themselves to operate on the open-shop basis.

The National Erectors' Association is the only national organization of employers in the building industry which concentrates all its attention on the enforcement of the open-shop principle. It enforces its policy through closely knit local Iron Leagues. During strikes it offers legal advice and supplies strike breakers and guard service trained more efficiently than those supplied by the ordinary detective agencies. The cost of the service is borne by the contractor who uses it. The commissioner who administers the work of the Association is a lawyer trained in industrial law.

This phenomenal success is due to several reasons. In the first place, iron erecting requires a large amount of capital; therefore there are fewer and more reliable erecting contractors. They can be organized and held together. Other trades, as we have seen, are permeated with fly-by-night contractors, often unscrupulous and always unorganizable. Furthermore, the Association receives moral and material support from steel producers who have a direct interest in keeping the industry open shop. Investigations in New York in 1921, for instance, showed that the Bethlehem Steel Company determined not to sell steel to the Thompson Starrett Company and other contractors unless they agreed to erect the steel under open-shop conditions.[10] A third reason for the strength of this association is that it does not dissipate its energies among various activities. It centers all its attention upon labor policies and leaves trade matters to be handled by the trade associations of steel erectors and fabricators. Moreover, in several cities other unions do not always support the ironworkers with sympathetic strikes which might force the closed shop upon the iron erectors.

(c) *The Associated General Contractors.* The different trade associations in the industry were composed mainly of subcontractors, although general contractors also were members. However, there was no association to represent the general contractors as a group. Out of the 107 national trade organizations in the building industry in 1918, not one represented the general contractor. In July of that year, contractors from a dozen cities were attending a conference on war construction. As an outcome, the Associated General Contractors of America was organized in November, 1918. Since then it has grown in strength and importance.

According to the best estimates, there are about 14,000 general contractors in the United States. Only about 4000 of these are eligible for membership in the Associated General Contractors, on the basis of the association standard of "skill, integrity and responsibility." The association recognized at the outset that its primary concern for some time must be with trade practices. Although in 1920 it went on record in favor of the open shop, it never attempted to enforce this.[11] It declared:

> We are opposed to any combination whether of labor unions or of contractors whereby the right to seek or furnish employment is limited to any particular class of persons, members of any association, organization or union. . . . No person shall be refused employment or in any way discriminated against on account of membership or non-membership in a labor organization.[12]

In more than one respect, this edict was a mere gesture. Opportunism and expediency eclipsed principles in a very short time. Chicago and New York general contractors, working under ironclad closed-shop agreements, obviously disregarded such declarations, while contractors in open-shop centers accepted them as a moral victory. In actual practice the Associated General Contractors of America recognized closed-shop unionism. It supported the National Board for Jurisdictional Awards, a premise of whose very existence was the principle of the closed shop. The association participated actively in the

campaign for apprenticeship training. Its particular proposal, that of removing the restrictions on immigration, was never accepted.

Besides these matters, it has done little on the labor question. As a unit the association remains passive, and thereby peace is maintained among the members whose operations are scattered through open-shop and closed-shop territory.

The service of the organization to its membership has been invaluable. Its work has raised the practices of the industry to a higher plane of stability and integrity. But in concentrating on trade practices, codes of ethics, standardization, contract forms and so forth, it has overlooked almost entirely the more important problems facing the industry — labor relations. In this lie the limitations of all trade associations and the local builders' exchanges.

(d) *The National Building Trades Employers' Association.* Surpassing these trade organizations in importance were the efforts to evolve an organization, paralleling the Building Trades Department of the American Federation of Labor, which would embrace all building-trades employers in the country. A complete parallel organization was impossible, however, because the local and national associations of employers were comparatively weak. In 1903, for example, a national building-trades employers' association was formed, but when it adopted the open-shop principle the New York building employers, then the largest organized group of contractors, refused to affiliate.[13] Another attempt was made in September, 1919, when the present National Building Trades Employers' Association was organized.

Its program emphasized labor relations, being: to prevent strikes; to create and maintain uniformity, harmony and certainty in the relationship between employers and employes; to eliminate jurisdictional disputes and secure a revision of present awards and claims, so as to eliminate overlapping and conflicting claims. The Association favors a uniform national

agreement with respect to the terms and conditions of employment, leaving questions of wages and hours to be settled on the basis of a zone system, in order to equalize bidding between communities. It also advocates arbitration of all disputes without any cessation of work.

On the issue of the closed and open shop, the Association takes no position. Once it does so, it will imperil its existence, for it almost inevitably loses those members who are hostile to a particular policy. However, the lack of a definite policy makes it ineffective. So far, at least, it has not played a prominent rôle in the industry. Its work consists primarily in calling to the attention of the contractors the important issues in the industry, and in conducting periodic conferences for a discussion of these issues.

During the shortage of mechanics in 1923 the Association carried on an intensive educational campaign to increase the number of apprentices in the industry. It participated in the formation of the National Board of Jurisdictional Awards and supported it until it ceased to function in 1927. It is now focusing attention on the five-day-week movement which is being fostered by several of the building-trades unions, and is attempting to mold opinion against this proposal. Although the New York contractors have not supported the National Building Trades Employers' Association, it has progressed further than any of its predecessors in giving attention to the labor problem.

(e) *The National Association of Builders' Exchanges.* The New York employers support another association which is no more effective in labor relations than the National Building Trades Employers' Association. This organization was formed in 1912 and consists of city, state and interstate associations engaged in the building industry. The objects are to promote the general interest of the building trades, the highest standard of efficiency, a more uniform system of contracts, and harmonious relations with those connected with the building

trades, whether they are engaged in the manufacture or sale of appliances, supplies, materials, or in the erection or maintenance of buildings. The organization is not interested primarily in labor relations. It devotes all its time to trade matters and to legislation in the interests of building groups; it favors the arbitration of labor disputes but has never developed a sound program to this end.

4. Tactics and Methods

Employers in the building trades in adopting a policy for labor relations have had to choose between fighting against unionism or coöperating with it sufficiently to insure fair consideration of the employers' rights. As long as the employer remained unorganized he was at the mercy of the union. If he were fairly treated, if his rights were protected, it merely indicated that he was dealing with a fair union. Of course, he had not been consulted about the union rules he had to maintain. If the union was not fair the "independent" unorganized contractor was helpless. He had no bargaining ability, or support from other contractors, should he refuse the union demands. A strike might completely ruin him, and this consideration was often sufficient to make him yield to any demands.

As a rule, the motivating force which induced employers in the building trades to organize was not the hope of eradicating unionism. In many instances unionism, though restricting the employer's liberty and right to "run his own business," was profitable. The unions and the closed shop could be used as a lever to compel competitive equality and, often, to bring about monopolistic conditions for a particular group of employers. However, irrespective of the original motive, employers organized either to combat unionism or to counteract its power. Many of the more important building-trades employers' associations follow the latter policy — that is, they develop into negotiatory organizations, entering into collective agreements with organized labor. Only a few contractors' organizations

are in the open-shop group. Nationally there is only one effective belligerent anti-union association to be mentioned, the National Erectors' Association above described. Locally, there are many more. The employers' associations of Detroit, Los Angeles, Indianapolis, Milwaukee and Philadelphia, to mention only a few, are opposed to unionism and refuse to negotiate with unions. Few, however, have achieved the success of the Industrial Association of San Francisco.

The technique these associations adopted in dealing with unions was based wholly on opportunism and expediency. Local industrial conditions were usually the determining factor. There was no standard for labor relations anywhere. In each city the employer used those methods which would best promote his ends. In New York, for example, the employers' association saw how they might use the unions to their advantage. It was first necessary, however, to "educate" them to the fact that they were but one of the many parties in the industry. It may be said that the 1903 lockout was fought to secure the "recognition" of employers. The machinery set up to secure joint control gave complete recognition to the closed shop and established joint working agreements. To force the unions into line whenever they violated their agreements, the New York employers used successfully the dual-union weapon.

When the dual-union method failed the lockout was instituted. In most instances this was not so successful, for the employers' association did not control a majority of the contractors in the industry. In many trades about half the union members worked for unorganized contractors who did not join the lockout. To succeed, a lockout had to have the coöperation of the material dealers.

Such alliances existed for many years. The material dealers always feared the danger of a completely organized building industry and supported most movements to curb union demands. For instance, in New York in 1903 the unions made strenuous efforts to organize the building-material teamsters. As an or-

ganizing lever they refused to install any material delivered by nonunion drivers. The material dealers did not wait for the full impact of this situation but locked out the drivers, leaving the men on the job without materials. The lockout was settled when the Building Trades Council agreed to exclude the material teamsters and to give up all attempts to unionize them. Although at no time since have the material dealers and the employers had such an alliance, yet its possibility is always a ready threat.

In Chicago alliances of building contractors with material dealers were more frequent and even more effective. In the 1900 lockout, the employers, through the influence of the banking group, forced the material dealers, whose work was completely unionized, to suspend operations. Such action was necessary, because, as in New York, a large number of contractors were not members of the associations and could not be forced to join in the lockout. Cutting off their supply of building materials was an effective solution. This weapon has since been used in every important strike and lockout. The unions have often resorted to the importation of materials to supply the independent contractors. In 1918 the Chicago contractors used this weapon with such effectiveness that the unions asked the courts for relief.

But nowhere has the alliance been so fruitful as in San Francisco. The defeat of the unions in that city was due to a large extent to this coöperation between employers and material dealers. The "permit system" enforced an ironclad boycott on all contractors and owners who refused to construct their projects on the open-shop basis. The efforts of the unions to fight this system in the courts were of no avail, and their attempts to import materials from other cities were equally unsuccessful.

Employers receive aid from other industries. The banking group have given significant aid by restricting credit. In Detroit other industries assisted the building contractors, on the

theory that in no city where the building trades were completely organized could the rest of the industries remain unorganized.

5. Conclusions

"The history of many attempts to develop effective national or regional and local organizations of building contractors," writes the secretary of the Cleveland Building Trades Employers' Association,

> would not be an encouraging document to read. The indifference of many, the jealousies of some, and the essential independence and individualism of most contractors have made the work of building up a powerful organization very difficult. . . . Every attempt to realize the potential values of such an organization has been retarded by the failure of contractors to respond in sufficient numbers, and with sufficient wholehearted support to furnish the initial impetus.[14]

The national organizations of building contractors have not prospered or developed into an effective force, chiefly because only a small portion of the contractors are organized. Without doubt the unorganized contractors hold the key to the labor situation in every city. They transgress all fair standards of competitive practice as regards wages, working conditions and the price for work. No one is more generous in granting bonuses or in violating union conditions during times of depression than the unorganized "independent" contractor.

The absence of a clearly defined labor policy on the part of the national associations is undoubtedly an important drawback to their success. Control over the many variable factors in the building industry is absolutely essential. On the labor side, the unions have such control. In some closed-shop cities, like New York, and open-shop cities, like San Francisco, powerful employers' organizations control their members. In New York the situation is most stable because both sides are thoroughly organized. In San Francisco, the unions are emasculated and stability will be uncertain until collective relations are

resumed. Stabilization leading toward control of the more important hazards which face every group in the industry must await the more complete organization of building-trades employers and the direction of their activities toward the joint control of labor problems in the industry.

CHAPTER XVI

INDUSTRIAL COÖPERATION: THE BUILDING CONGRESS MOVEMENT AND THE AMERICAN CONSTRUCTION COUNCIL

1. The Need for an Inclusive Industrial Organization

BY FAR the most encouraging approach toward an understanding of the building industry and its many problems was made when the Building Congress and the American Construction Council were organized and formulated their programs. The necessity for an all-inclusive association to cement the many divergent interests in the industry had long been felt. For many years various groups were organized to solve special problems. The workers formed labor unions to improve conditions of employment and to increase wages; the contractors organized trade associations to correct specific abuses prevalent in their business; the material dealers combined for the consideration of special trade problems; the architect also had his professional society interested in improving conditions of particular concern to him. All these separate interests, separately organized, were engaged in improving methods in the industry and adopting sound business practices for their own trades. But at no time were these divergent and often antagonistic interests brought together for the consideration of problems affecting the whole industry and influencing the position of all the groups within it. Until 1920 the construction industry was made up of

> loose unfederated little monarchies and republics agreeing on no common boundary line. . . . Twilight zones were everywhere in which disputes developed and guerrilla warfare flourished. Each group seemed to feel that some other group was trespassing on its private preserves and the result was much misunderstanding.[1]

The situation produced by the war provided the experience out of which closer harmony was to be developed and attention focused on problems in the solution of which all groups were interested. The urgency to produce only necessities placed construction in the class of nonessentials and seriously curtailed projects of every kind. By 1917, in spite of the efforts to maintain "building as usual," the industry had suffered a severe depression. In the large cities the building industry had been practically at a standstill for two years. Projects had been postponed in the expectation that prices would fall. But prices failed to come down. To prevent total stagnation, conferences of various construction interests were held in numerous cities early in 1917.

An organization which could represent the entire industry for administrative purposes during war time, as the Automobile Board of Trade, for instance, represented that industry, was the outstanding need. Numerous pilgrimages to Washington of large delegations, representing first one unit and then another of the building industry, had accomplished little. The manifold independent organizations were rarely grouped together as related elements of a diverse and complicated industry whose finished products were buildings. They appeared before the public as national units of separate organizations, such as the National Lumber Association, the Portland Cement Association, or the American Institute of Architects. In view of this situation the industry possessed limited means of common counsel; it had no forum for the discussion of broad and general questions facing every group in the industry.[2]

The experience in coöperation produced by the war was only one incentive for the organization of the industry on a different basis. Legislative investigations in New York, Chicago and other cities revealed that collusive agreements between groups of contractors had resulted in rigging of bids. Labor leaders were involved in irregular practices. Material dealers artificially raised the price of their products. Bankers and mort-

gage houses charged excessive rates for financing building operations. The building industry was in bad repute. However, illegal and anti-public combinations were only partially responsible for exorbitant prices. Waste and duplication of effort abounding in every building trade were contributing factors which had received scant consideration heretofore. The public lacked confidence in the industry and this further retarded the recovery from the building depression. These conditions made house cleaning imperative. This could not be done by the separate trade organizations acting independently of each other. Architects began to talk about the possibility of creating a permanent building "industry organization" to include all elements from the designing to the decorating of a structure.[3] The precedent for such an industrial organization was found in the English experiment started under Malcolm Sparkes in 1916.[4]

2. The Building Congress Movement

In response to this need definite steps for securing greater coöperation among the different groups were taken. The first meeting for an all-inclusive organization was held in Atlantic City on August 6, 1920. Members of the National Board for Jurisdictional Awards, then in session, contractors, labor leaders, engineers, architects, manufacturers, dealers, building financiers and technicians participated in launching the Building Congress Movement. It took the name National Congress of the Building and Construction Industry. A second organization meeting was held in Chicago on September 27 and 28, 1920; and a third one about a month later in Pittsburgh. Local congresses were organized in Boston, Philadelphia, New York, Portland, Washington, Seattle, Kansas City, Denver and Indianapolis, and a state congress in New Jersey.

The membership of a building congress includes architects; engineers; general contractors; subcontractors; construction labor; material and equipment manufacturers; material and

equipment dealers; financial, surety, accounting, insurance, real estate, and building and loan organizations; members of federal, state, county and municipal bureaus or departments concerned with construction; builders' exchanges; building-trades employers' and similar associations; boards of trade; public utility construction departments; building-trade publications and building statistical organizations. It functions through a number of standing committees, among which are committees on apprenticeship, building codes, commercial arbitration, seasonal unemployment, standards, safety and recognition of craftsmanship.

In each locality the driving force behind the organization of the Building Congress was some special problem which demanded solution. Of course, to the leaders of the movement, the advantages of an organization including all the elements were apparent. But the appeal to the divergent interests for coöperation had to be more specific. In New York City, for example, the particular issue which brought the different groups together was the training of apprentices. From this task, and the fact of association, new activities were undertaken. Obviously, the new movement had to steer clear of activities which were not of general interest. Purely trade matters, questions of wages, hours and conditions of work and specific trade practices were left to the trade organizations and the unions in the respective trades. At the same time, the Congress had to avoid discussion of controversial questions, such as the open or closed shop and rules for the regulation of working conditions. The intervention of a "third party" in the discussion of much-disputed issues, particularly in cities where these issues had a long history, would aggravate rather than improve the situation and would cause opposition to the new movement.

As a result the Building Congress Movement has concentrated on those problems in the solution of which the whole industry could participate. The question of apprenticeship train-

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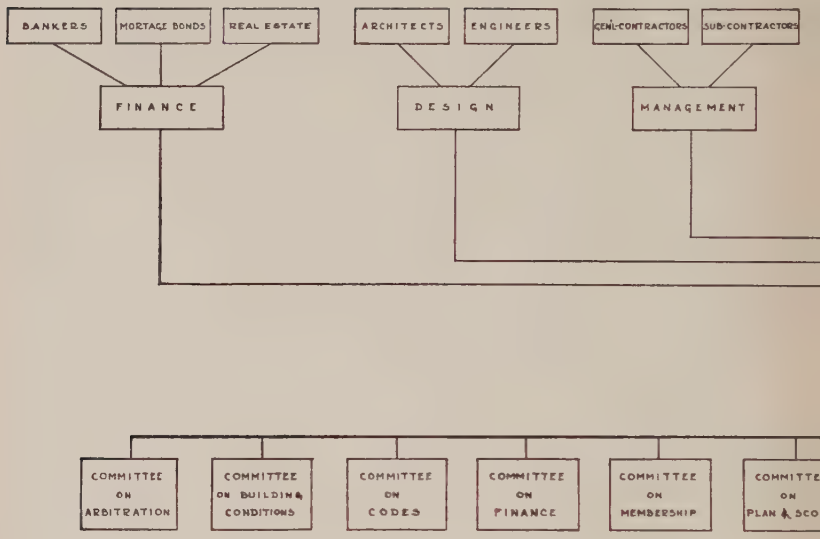

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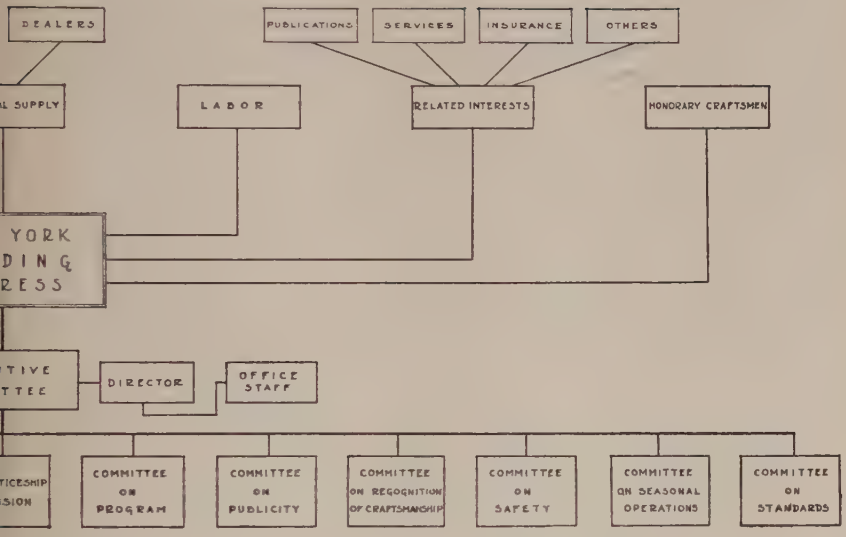
W YORK BUILDING CONGRESS



ing, for example, early appeared as important and was the first to receive attention by the various local congresses. Seasonal unemployment, recognition of craftsmanship and inter-group relations were other problems of an industrial, rather than trade, appeal and consequently came to be considered by the various congresses.

Probably the most effective local congresses were those organized in New York City, Boston and Philadelphia. The form of organization, principles, activities and membership are fairly similar in all cities. Chart VIII represents the structure of the New York Building Congress and is typical of the organization in other cities.

3. Activities of the Building Congress

The activities of the building congresses include every phase of building in which general coöperation can be secured. The problems considered are not only the obvious issues which cause waste and inefficiency, but the solution of fundamental evils which affect the industry. The New York Building Congress, for example, was organized on April 21, 1921, with the object of enabling

> the Building and Construction Industry to promote the general welfare — (1) by discovering through scientific surveys the needs of the public and of the industry; (2) by finding and recommending ways and means of satisfying these needs; (3) by defining group functions and harmonizing group activities through the formulation of codes of ethics and of practice for the industry, and by other means agreeable to and in the interest of the public and the industry and conformable to law.

This group has given much attention to the problems of apprenticeship training, recognition of craftsmanship, commercial arbitration, standardization, safety and accident prevention, seasonal unemployment, codes of ethics and building surveys. The Philadelphia Building Congress desires to "place the construction industry on a high plane of efficiency and to

correlate all plans for betterment now being made by existing organizations." The Portland, Oregon, Building Congress seeks to "secure greater efficiency in building and construction . . . to foster and organize proper educational facilities, . . . and to conduct and aid scientific and economic research pertaining to building." These general programs have in all instances been subordinated to specific issues requiring immediate attention and coöperation.

(a) *Apprenticeship Training.* The problem which received first attention in almost all centers was that of apprenticeship. The New York Building Congress, for example, made a thorough study of the question. It discovered that in nearly all the New York trades the union rules were not directly responsible for the shortage of mechanics; that the number of apprentices could be greatly increased before the limit set by the unions would be reached. The first task was to establish some definite program of training, and to correlate the activities of the cooperating craft apprenticeship committees. The Building Congress engaged one of the best men in the country on vocational training, to supervise the various committees in charge of training boys. The Apprenticeship Commission was created to induce a sufficient number of boys to enter the trades, to encourage employers to employ their quota of apprentices, to secure coöperation in providing apprentices with steady employment, and to organize the training courses.[5]

The apprenticeship program was put on a constructive basis. A boy was indentured to the craft apprenticeship committee and not to an individual employer; no boy was taken on unless a job could be found for him; once employed, the committee assumed responsibility for his employment during the four years of his apprenticeship; the scale of wages was often higher than the boy could secure in any other industry; in each craft the unions and the employers had the apprentices under joint control; the Apprenticeship Commission of the Congress supervised their education and provided, through the coöpera-

tion of the Board of Education, regular classes, attendance on which was compulsory, on pain of discharge from the job and expulsion from the union.[6]

As a result of this program, the New York Building Congress has been given credit for ending the shortage of mechanics in the metropolis and for laying the foundation for the training of future mechanics. The apprenticeship campaign, now in its seventh year, embraces nine trades and has enrolled more than nine thousand boys. The commission was influential in securing the revision of apprenticeship quotas of the bricklayers', plasterers' and electrical workers' unions.

(b) *The Movement for the Recognition of Craftsmanship.* Not only has the program for providing thorough training in craft fundamentals been efficiently organized, but the recent movement for the recognition of craftsmanship and for the encouragement of better work in the building trades promises developments of a novel and constructive character. The new technical environment and specialization has enabled unskilled and poorly trained workers to secure jobs in the building industry. The "all around mechanic" is of less consequence today than at any time in the past. The emphasis on speed rather than quality has become the prime consideration in many building trades. These conditions have lessened the worker's interest in his occupation and destroyed his pride in the craft. At the same time, the operations of the "jerry builders," producing for an owner who is not to live in the building and for a price that is often the result of cutthroat competition, has called forth much complaint about poor quality and shoddy construction.

A prominent leader in the industry, in addressing the New York Building Congress in 1922, said:

> We are troubled over the decline of the spirit of craftsmanship in the building industry. We lack craftsmen. We are cursed with a horde of contractors who have no interest in good workmanship. We see a public that is hunting bargains in buildings, or that looks

on building construction solely as a speculation with quick turnover and a "get away" before the paint has worn off and disclosed the dishonest workmanship beneath.[7]

Leaders in the building industry, particularly architects and those active since 1921 in the building congresses of New York, Philadelphia, Boston, Portland and other places, recognized the dangers of the situation and proposed to remedy it. The task was stupendous. Never before had it received consideration. Houses and buildings were needed; the public was willing to pay for anything having a roof. Why bother about quality?

The purpose of the craftsmanship movement was to supply the impetus for higher quality. It was to recognize superior skill, put a premium on pride in work, urge public recognition of "plastic artists" and give to the industry what quantity production, speed and specialization had taken away. Workers, so the leaders of this movement urged, would be trained to be all-around mechanics, "masters of the art of working in stone and brick and timber and metals and of fitting them together with exactness and superior finish." Foremen, superintendents, subcontractors and general contractors, were themselves to be craftsmen of outstanding rank "who demand good work, who take pride in what they are doing, who look on each building not merely as another structure to be thrown together and to be forgotten but as monuments they shall cherish." Finally, owners were to be educated to "the high economic value of good work, and the spirit of craftsmanship was to be revived not only in workmen but in every link in the chain of the building industry."

The movement for the recognition of superior craftsmanship among the principal crafts, including carpenters, brick masons, plasterers, plumbers, electricians and painters, was initiated by the Portland Association of Building and Construction in 1923. With the aid of the State Board of Vocational Education, skilled workmen were given special recognition and became members of the Guild of Building Craftsmen. The New

York Building Congress has a Committee on Recognition of Craftsmanship. Its objects are to give recognition to craftsmanship on specific building operations, to stimulate the interest of the industry in true craftsmanship and to convince the public of the value to it of true craftsmanship in building construction.

The aim is to recognize by a suitable ceremony and certificate the superior craftsmanship of one of the artisans in each of the major crafts engaged on a given operation. The committee urges that in every building a bronze tablet bearing the names of the workmen so recognized be erected. Under this plan it is first necessary to secure the consent of the owner. If this is granted, a Committee of Award for the job is formed. A representative of the New York Building Congress acts as chairman, and the owner, architect, general contractor, subcontractors and workmen are represented. The outstanding man in each craft is selected — not alone on the basis of quantity and quality of work performed, but for the spirit of coöperation and loyalty shown and the pride of the mechanic in his work. The craftsmen, at a suitable ceremony, are presented with certificates designed by the New York Building Congress and signed by its officers. In case a tablet is to be erected, there is an unveiling ceremony, which the selected craftsmen, members of the New York Building Congress and representative public men attend. An honor roll of those who have received craftsmanship certificates is kept by the New York Building Congress, and the advice of these superior men is to be sought in further extension of the movement. The craftsmen so selected become honorary craftsmen members of the New York Building Congress.

The building congresses in other cities also have embarked on similar programs. The Philadelphia Building Congress awards certificates of craftsmanship to journeymen who distinguish themselves in their work, certificates of Assistant Craftsmen to improvers and helpers, Junior Craftsmen certifi-

cates to apprentices and learners, Master Craftsmen certificates to architects and engineers, Coöperating Master Craftsmen certificates to builders and subcontractors, Construction Workmen certificates to common and unskilled laborers.

The movement has made great strides since 1926. Architects and builders all over the United States are alive to the possibilities of encouraging the workmen through efforts similar to those of the building congresses. Committees on craftsmanship have been organized in twelve cities, largely as a result of the interest evinced by local chapters of the American Institute of Architects.

The benefits to be derived from a movement of this nature affect all the groups in the industry. The revived spirit of craftsmanship would breed a loyalty to the industry among workers, foremen, superintendents, contractors, architects and engineers "that would present a fighting barrier against the forces tending to disrupt it and lower it in the estimation of the public." The spirit of the old medieval guilds is not absent from this movement, for it was hoped that it would, in the words of Mr. E. J. Mehren, "restore the social position of the worker, giving the true craftsman an honored position in the community and counteract the drift to the white collar jobs. . . . The day would return when a man's proudest title was to be called a 'good mechanic.'"

More practically, the immediate results of this movement have been to improve the training given apprentices in the building trades; to encourage owners and architects to employ competent contractors, on the basis of skill, integrity and responsibility, and not on the basis of the lowest price submitted; and to change the attitude of the public toward the building industry in general.

The limitations of the movement are many. Obviously, the present organization of the industry precludes any long-time constructive program in the interest of craftsmanship. Speculative builders are primarily interested in the rate of return on

investment. Contractors, by and large, as the situation stands today, having secured a contract by underbidding their competitors, are interested in doing a job at the lowest possible cost. More often than not, this is not consistent with good work and craftsmanship. Owners are not yet convinced of the economic value of good work, since rapid technical changes and new demands make new buildings necessary before the old ones cease to be useful. The worker's reaction also is one of insecurity greatly aggravated by the extent of seasonal unemployment. His interest in the job is often forced by economic necessity rather than by spontaneous pride in workmanship. With the constant threat of unemployment present, it is to his interest to make the job last longer — not necessarily to make the work better. He shifts from employer to employer at the end of each building project, and thus loses the opportunity of developing an interest in a particular construction organization and in upholding the reputation for workmanship which such an organization possesses.

At the same time forces at work in the industry not only make the development of craftsmanship desirable but tend also to help it develop vigorously. The fact that the building trades are still to a large extent handicraft trades and that increasing mechanization does not apply with such force to the building industry as it does to many other industries, provides the possibility for a sound emphasis on individual skill. Considerable skill will always be required, even to make mere installations in many of the trades. Also, while the worker's reaction to his job is mainly economic, there is still a great deal of pride in workmanship. The discussion and activities in connection with the craftsmanship movement alone have undoubtedly stirred this feeling to activity in a large number of workmen. "One should see the enthusiasm of the men who receive certificates and of those who applaud them to fully realize what is happening," states an active participant in the movement in New York City.[8] Several hundred men attend each of the ceremonies when the craftsmanship awards are made.

The writer had the opportunity of attending the presentation ceremony at the completion of the New Madison Square Garden in New York City. At 11.30 A.M., the workers gathered in the large hall and listened for half an hour (on the contractor's time) to the presentation addresses made by the different groups of the award committee. When the craftsmen chosen in each trade came forward there was a general spirit of appreciation in the entire crowd, and applause and congratulations, not unlike the ceremonies at a high-school graduation. The men themselves seemed to appreciate the recognition. An old laborer, possessed of no specific trade skill, was chosen for the first time in his life to receive recognition from his employer, his union, his fellow workers and the owner for the interest he evinced in his work, for the coöperation he showed with the general plan of work. A gray-haired bricklayer, who has probably been on the wall for thirty years, for the first time was told that his work was sincerely appreciated by all those affected by it. The bronze tablet erected tells all posterity that he has taken a significant and appreciated rôle in the construction of the building. The New York Building Congress alone has awarded 1005 craftsmanship certificates on seventy-four building projects.

Finally, an important by-product of the movement is a result of the fact that it brings together men representing major elements in building and gives them a chance to see each other face to face. A more wholesome point of view is being created; a respect for the function which each group performs is being developed; and a genuine coöperative spirit results. All these benefits indicate that, with proper efforts to correct the methods and conditions prevailing in the industry, a vital craftsmanship movement is possible.

(c) *Seasonal Employment.* A shortage of houses and office buildings cannot be overcome quickly, nor can a surplus of buildings be transferred to another city. The congress movement knew the importance of stabilization in this industry,

and made strenuous efforts to bring about a realization of the situation on the part of the public and the industry. Through educational work, based upon facts carefully collected, the congresses in different cities demonstrated what great economic savings could be effected by a more even distribution of building construction during the year. The Boston Building Congress surveyed the number of men available during the various months of the year. Thousands of leaflets, containing specific suggestions based on these facts, were distributed. This congress demonstrated the desirability of planning construction in relation to the availability of labor, thereby promoting more uniform employment of labor and consumption of building materials.

The New York Building Congress made employment studies of more than ninety thousand workers. The New Jersey and the Philadelphia congresses also did valuable work in this connection. Particularly effective were the activities of the latter in inducing owners and building managers to adopt a definite policy of doing repair work at the time when the normal slack exists, thus eliminating the pressure on the labor and material supply during the peak-load months.

(d) *Trade Ethics.* The various congresses gave considerable attention to elevating the ethical level of the industry. They established codes of ethics for the different groups. While no set rules can be formulated which will particularize all the duties of all branches of the industry in their relation to the public and to each other, a comprehensive list of principles serves as a guide. The building congress codes seek to embrace the subject, not from the point of view of any one group, but from that of the industry as a whole. Several of the professional and trade associations in the building industry have their own codes of conduct, and generally these deal with particular trade interests.

The code of the New York Building Congress contains sections dealing with the duties of the owner, the banker, the real

estate broker, the architect, engineer, contractor, subcontractor, material dealer, manufacturer and labor. The code lists only the negative aspects of conduct. This is accompanied by an exposition setting forth in greater detail the functions of the different groups in the industry, the obligations they owe as well as the rights they possess. It seeks not only to explain the "dont's" but to evaluate the rights, duties and privileges of all the groups which make up this large industry.

(e) *Commercial Arbitration.* The New York Building Congress introduced an innovation in the construction industry — commercial arbitration. It became significant only a few years ago, when industries realized the cost and futility of submitting their disputes to men who did not comprehend the intricacies of their industry and the details of their transactions.

In 1920 the State of New York adopted a law facilitating commercial arbitration. Similar laws have since been adopted in New Jersey, Oregon, California, Pennsylvania and Massachusetts. Arbitration bills have been introduced in the legislatures of many states. On January 1, 1926, the United States Arbitration Act became effective, making valid, irrevocable and enforceable written provisions or agreements for the arbitration of disputes of an interstate nature. Early in 1926 the American Arbitration Association was formed. It is a voluntary educational organization, whose primary purpose is to promote knowledge of arbitration and its application to the settlement of disputes. To this end it conducts research, cooperates in the establishment of arbitration tribunals in trade organizations and collaborates with government departments, bar associations, trade, commercial or banking organizations, professional bodies and other interested agencies.

In January, 1924, the New York Building Congress, in order to advance arbitration in the building industry, established an Arbitration Court according to the New York Arbitration Law, which provides that "two or more persons can agree in writing to submit an actionable difference or controversy to arbitration

and such written agreement to arbitrate is binding and irrevocable." The "Standard Specifications" now being adopted for the New York building industry contain the following clause concerning arbitration: "Any dispute or claim arising out of or relating to this contract or for the breach thereof, shall be settled by arbitration under the Rules of the Arbitration Court of the New York Building Congress or the American Arbitration Association and judgment upon an award may be entered in the court having jurisdiction." Numerous disputes have already been arbitrated by the tribunal and many more settled by advisement. The range of time in securing settlements is between three and one-half hours to three weeks. The same disputes, litigated through ordinary court procedure, would have involved much money for court costs and attorney fees; and months of time, if not years, with no better results.

The Arbitration Court of the Congress has a panel of 100 men selected from the various branches of the building industry. These men, representing every phase of the building trades, whose knowledge, experience and fairness help to counteract any possible distrust, are well qualified to serve as arbitrators. Disputants seeking to settle their controversies through the arbitration court of the building congress are not confined to this panel, but if they select an arbitration judge outside the panel, he must be approved by the arbitration committee of the building congress. The code of ethics adopted by the building congress guides the arbitrators in making their decisions and awards. In time these arbitration tribunals will create a common law for the industry, based on practical working rules, which will be more responsive to the needs of the industry than existing statute law.[9]

(f) *Standardization and Elimination of Waste.* The building congress movement, as a result of its inclusive membership, has been in a position to secure coöperation among contractors, craftsmen, architects, engineers, financiers and owners to the end of eliminating waste by reducing the variations in sizes and

styles of building materials. Considerable publicity has been given to the findings of the standardization bodies working in coöperation with the United States Department of Commerce. During 1925 the New York Building Congress Committee on Duplication of Effort submitted a considerable volume of data which is now being assembled and analyzed. The Committee on Elimination of Waste attempted to centralize estimating through a quantity survey method, but found that there was no unanimity of opinion on that matter, and deferred the plan until a later date.

For the past three years the New York Building Congress through its Committee on Standards has concentrated on the preparation of a set of standard specifications, one for each trade in the building industry. The specifications are drafted by experts on the committee and are then sent for comment and criticism to the trade association involved and to experts in the trade generally. A special committee of the New York Chapter of the American Institute of Architects has been appointed to coöperate with the standards committee in giving final approval to the specifications.

Each standard specification will include a complete description of the method of construction to be followed in that trade — the quantities or variations from the standard method will be stated by the architect in a supplementary form which will apply to a specific building operation. The specification makes those clauses of the standard contract form of the American Institute of Architects which relate to general and special conditions a part of the contract, and provides that disputes arising under the contract shall be arbitrated by the court of the New York Building Congress or by that of the American Arbitration Association.

(g) *Safety Work.* A special committee on safety was organized by the New York Building Congress to study and recommend safety measures for the building trades. A pamphlet, "Why Every Branch Should Be Vitally Interested in the

Prevention of Accidents," was widely circulated. The congress set up a special safety forum to coöperate with other organizations interested in accident prevention in the building industry. As a result of the work of the committees, contractors are realizing the value of a uniform method of reporting accidents and the advantage of placing every important job in charge of a safety committee. The publicity given to safety through the activities of the committees led to the creation by the Building Trades Employers' Association in New York City of a "Committee on Safety and Accident Prevention." This committee now has a paid secretary, a safety engineer, on full time.

(h) *Other Activities.* A Committee on Plan and Scope is constantly on the lookout for problems which demand coöperative attention, and these, when discovered, are put in charge of special committees. The Publicity Committee is charged with the duty of informing the various branches of their organization on subjects of general interest to the industry — such as zoning, safety, accident prevention and new legislation — and also of informing the general public about the activities of the building congress. This is done through the *Building Congress News*. The function of the Building Conditions Committee is to inform the membership as to the volume of building in Greater New York, analyzing the statistical information so as to indicate the trend in construction.

4. Attitude of Labor

The congress movement has succeeded in combining all the employing groups for coöperative purposes. A greater achievement has probably been the fact that, for the first time in local industrial history, labor has been invited to coöperate in the solution of problems which are largely within the province of management. The labor group in the industry has from the beginning been an integral part of the congress movement. In New York City the Building Trades Council is represented by five members and many local unions hold separate member-

ships. The labor members and the unions they represent have contributed much to the development of several of the congress policies. This is particularly true of the congress program on apprenticeship training, the success of which has to a very large extent been based on the willingness of the trade unions to coöperate, and in many cases to relax their rules concerning apprentices. Similarly, it can safely be asserted that without the active coöperation of the unions the movement for the recognition of craftsmanship could not have succeeded. The union representatives have coöperated in choosing the craftsmen to be honored and have participated in the ceremonies recognizing craftsmanship. The safety work of the congress has also received the active support of labor. In many cases labor has received direct benefit from the deliberation and work of the building congress, particularly in regard to the studies on seasonal unemployment and the apprenticeship question.

5. Summary

The building congress movement is barely eight years old. It is difficult to judge its future effectiveness. Thus far it has functioned during a period when the building industry has been prosperous. Building contractors are willing to coöperate when there are enough jobs to go around. Labor participates when it can secure wage increases and other demands without strikes, and when industrial conditions permit it to relinquish for a moment its vigilance over working conditions. What will happen when a depression strikes the building industry? Will the congress be able to maintain its membership? Will all these groups be willing to continue coöperation and to spend large sums of money for coöperative undertakings? A depression might again throw the building industry into a war of cut-throat competition and "bid-peddling." Can the building congress survive such a period?

Secondly, the activities of the building congresses affect only a very small portion of those engaged in the building industry.

There are probably hundreds of contractors and labor leaders in New York building circles who have never come into contact with it, and not a small number who have never heard of it. The leaders in the congress activities are representatives of the larger contractors; they are progressive, ethically inclined and willing coöperators. The larger number of subcontractors, whose business practices the congress attempts to influence, remain outside the pale. The results of surveys, findings and recommendations do not reach them. Their uncertain economic status makes them difficult to organize and unwilling to coöperate. Moreover, the number of congresses established throughout the country is comparatively small. Only the larger cities have been won over to the congress idea; other cities still operate under the old method of individual effort.

In spite of these obvious limitations the building congress movement has already demonstrated the possibility of an inclusive industrial organization. In the long run, the advantages of coöperation will overcome the obstacles. What the leaders in the industry are accomplishing through coöperation is slowly becoming known to the "rank and file" of the contractors. The greatest benefits of the movement lie not so much in the actual and direct results which accrue as in the degree of understanding which is achieved by the different groups. Out of the discussion of the common problems there will naturally "crystalize a program of action stretching far into the future, a program not conceived in the wisdom of a single group or element, but in the enlightened understanding of the whole, self-conscious, unified industry." While the practical accomplishments of coöperation are of tremendous importance, the opportunity for understanding through contact among the different groups, which the congress provides, is fast being looked upon as the biggest single achievement of the building congress movement.

6. The American Construction Council

(a) *The Need for a National Federation.* The American Construction Council represents the building congress idea of cooperation on a national scale. Its organization had its genesis in conditions identical to those which stimulated the local movement. Many problems needing solution could be handled only through a national organization. The building industry was overorganized and at the same time lamentably disorganized. Although there were already hundreds of national trade associations in the building industry, there was no agency coördinating their activities. Contractors, material manufacturers and dealers, real estate interests and labor — all were banded into special national organizations each heedful only of its own interests.

The American Institute of Architects assumed the leadership in a movement to coördinate the building industry and create a national federated organization. In 1918 it issued a call for a national conference of all building-trades organizations. The convention of the United States Chamber of Commerce in that year spurred on the movement. As a result, the National Federation of Construction Industries was formed.

It was hoped that this federation would enable the building industry to share the information gathered by different units, would provide it with a national forum and would improve the relations between the various groups. From the outset, however, the National Federation of Construction Industries showed itself ineffective in cementing the industry. It was a war organization, and though it existed until 1923, it did not bring about any unity. It was considered primarily as an organization of the manufacturing and material interests in the industry, and it had little to offer those engaged in actual construction. Labor was not invited to participate, and the leading organizations of contractors and architects remained aloof. By the end of its fifth annual meeting in 1923, interest in the federation had petered out, and it ceased to exist.

But the need for a national federation of construction interests, dedicated to the task of securing coöperation in correcting the abuses which have made the methods and practices of the industry notorious, was more pressing than ever. While the impetus for such an organization probably arose out of a desire to solve some of the pressing problems in construction, the general lack of public confidence in the integrity of the industry, particularly between 1919 and 1923, was the immediate reason for uniting the more progressive groups.

Secretary Hoover's interest in the development of industrial coöperation for the purpose of regulating industry and correcting its abuses spurred on the efforts to organize construction on a national scale. As Mr. Hoover put it, referring to revelations of graft and sharp practices,

> The government can catch occasional crooks, but the cleaning can be done infinitely better by the decent men in the industry, if they will organize to do it. . . . The practices of a small minority are unendurable. They smear with shame the high standards of American business and labor; they drag in disrepute the vast majority of good men in these vital industries. . . . If you think it wiser to do so [referring to short deliveries and fraudulent alterations in quality of lumber products] we could probably secure the enactment of a "Pure Food Law" in all building materials.

But the ideal of regulation of industry by industry need not be limited to the elimination of the crooked and dishonest, for "a great field of service to the industry itself and to the country as a whole lies in the elimination of those great indirect wastes which are beyond the control of any one individual or concern and can therefore only be accomplished by associated action. . . . The initiative of a single individual is the most precious part of the whole economic fabric, but there are limits beyond which, if we would make the full field of national efficiency we must have coöperation between individuals. . . . The restraint of crooks does not necessitate the restraint of constructive action for better business practices." [10]

In 1921 the Associated General Contractors of America called a conference of architects, engineers, contractors and labor to meet with the Secretary of Labor, James J. Davis. This meeting endorsed the proposal for a National Conference Board for the Building Industry. Action was postponed, however, to await the outcome of the President's Unemployment Conference in 1921. As a result of the Unemployment Conference, a Permanent Committee on Construction, representing all elements in the industry, was organized. As this committee included in the scope of its work all that had been outlined for the proposed National Conference Board, the latter was not organized. The Permanent Committee on Construction, however, remained inactive.

Representatives from all these movements, together with those from various branches of the industry, met informally in Chicago in April, 1922, and discussed the method of consolidating all these activities into an inclusive industrial organization. A formal meeting was held in Cleveland later in the same month, and plans for the American Construction Council were drawn up and endorsed by Herbert Hoover on May 3, 1922. At the organization meeting of the Council, held in Cleveland on June 19, Mr. Hoover acted as chairman and Franklin D. Roosevelt was elected president. Mr. Dwight L. Hoopingarner, executive secretary of the Cleveland Building Trades Employers' Association, formerly a consultant in industrial relations, became executive director.

The organization of this council was a novel experiment. It was an association of associations, each having equal voting power. For the first time in American industrial development a great industry attempted to unite all its elements, including financial, bonding, insurance and real-estate interests, architects, contractors, material and equipment manufacturers and dealers, public officials and labor, into a national organization. The building congress had already accomplished this on a local scale. It was hailed as the most progressive step the industry

had ever taken. Labor endorsed the council very emphatically. John Donlin, addressing the convention of the Building Trades Department, said:

> I am not advocating entangling alliances but I urge that we participate, use our influence with others to promote the industry and mutual interests and tend to avoid those things injurious. The whole industry today is in bad repute. Every element thereof is censured; strikes, lockouts, shortages of material and labor, high financing costs, high costs prevailing throughout. . . . These conferences will eliminate the differences, great and small; will remove the causes of strife, the hazards of misunderstandings; will promote confidence, justice, good will; will create amity and a feeling of dependence, creating public approbation, for in the last analysis public opinion is the court of last resort, wherein all questions affecting the general welfare are settled.[11]

Other groups in the construction industry similarly endorsed the work of this organization, and it appeared that in the construction industry associations and trade activities were finally coördinated.

7. Activities of the American Construction Council

Since the more important problems facing the construction industry are primarily local problems, requiring local coöperation, the task of the council differed in important respects from that of the building congress. But while the desire to avoid duplication of effort might prescribe that certain problems be left to the jurisdiction of the local organizations and only those of a definitely national character be handled by the council, the necessity of a national agency to coördinate various local activities and to make the findings available to the country as a whole made it necessary that the council be concerned with problems which are handled by the local congresses as well as with those which are only national in scope.

(a) *Apprenticeship.* Thus, while the apprenticeship problem affects each community differently, and while the appren-

tices must be found and trained locally, much can also be done through national coöperation toward the division of the important functions. The council, for example, pointed out that, while the local bodies were meeting the shortage of mechanics, there was a great danger of a national oversupply if each locality proceeded in its program independently. Apprenticeship was looked upon as a national question, which could not be solved merely by treatment in isolated spots, without regard to other sections of the country and national needs as such. The council, therefore, attempted to balance the long-time demands with the supply of labor to prevent a permanent overmanning of the industry. When the urgent need for mechanics in the industry had been met, the council decided to embark on a larger program involving a thorough study of all phases of the problem of labor supply and training. Through its Committee on Apprenticeship, Vocational Guidance and Craftsmanship, it proposed to make a national survey which would compare the methods of training used in different communities and recommend from time to time the best principles tried thus far. To the present time little direct progress has been made with this program, primarily on account of lack of funds.[12]

(b) "*Better Building.*" The "Better Building Campaign" of the American Construction Council, inaugurated in 1924, called attention to "the very serious situation confronting the country because of the large percentage of present day buildings, especially housing, that is distinctly inferior in quality and unsound in financing." It pointed out that many houses recently built were so carelessly constructed that within ten years' time, sometimes less, they would be practically valueless.[13] This meant a heavy burden in repairs and maintenance and a serious loss on the principal invested. It was to help remedy this situation that the council in the fall of 1924 appointed its general Committee on Better Building. The committee attacked the problem by considering first the needs of the prospective home builder of moderate means. It made a

national survey of conditions and prepared recommendations, emphasizing the importance of quality construction and better financing of homes.[14]

(c) *Reducing Seasonal and Cyclical Fluctuations.* The American Construction Council did probably its most effective educational work in connection with the movement to stabilize building construction and particularly to reduce the cyclical fluctuations in the industry. The council has a permanent Committee on Seasonal Unemployment, which proposes to analyze and study the weather and seasonal conditions, with particular reference to construction activities in the various trades. It hopes, through local coöperation, to compile information and promote methods of decreasing intermittency of employment due to such interference by the elements as can properly be overcome. In conjunction with the American Railway Association, it has conducted a nation-wide campaign of publicity to eliminate construction peaks and depressions.

The best illustration of the activities of the council in the interest of stabilization was the warning issued to the construction industry and to the public in 1923. In 1921, the building "boom" took on greater and greater impetus. By the end of 1922 and beginning of 1923, the operations of the industry were characterized by a high volume of building, high material prices, premiums on material deliveries, bonuses for labor and high bids for contractors. It was feared that building activity throughout the country was progressing at an over-rapid pace, and that this condition would soon precipitate a depression. Warning signals were repeatedly sent out, and various organizations gave special consideration to the problem. For example, the Associated General Contractors, meeting in May, 1923, centered their attention chiefly on the situation produced by the abnormal amount of work already let out to contractors and the additional projects still in the hands of architects and engineers. It was feared that the total amount would so load the industry as both to make building operations hazardous,

and to lead to an inflation in prices sufficient to produce serious depressions. It was thought imperative to head off inflation and thus avoid a duplication of the generally unfavorable condition of 1920.[15]

Early in 1923 even conservative building journals predicted that while prospects were good for a year of intense building activity, danger lurked in the increasing cost of material and labor. It was observed that unless these increases were checked, a serious slump would follow. Soon evidence appeared to substantiate these fears. For instance, a project for a 3000-room hotel in Chicago was postponed on account of the tremendous rise in costs since its inception. The price of the steel needed for this project alone had increased fully $900,000 from April, 1922, to April, 1923.[16]

Shortly thereafter came the publication of Secretary Hoover's letter to the President, recommending the withholding of contracts for Federal buildings until the demand upon the building facilities of the country should have somewhat diminished. This was soon followed by reports from various parts of the country of projects canceled on account of high prices.[17]

In New York City the situation developed rather more rapidly than elsewhere. By April, 1923, it was generally recognized that considerably more new construction had been undertaken than could be adequately handled with the men and materials available, and keen competition set in for such supplies as could be obtained. In regard to labor, the situation was aggravated by the absence of an accepted wage rate. Rather than increase wages above the old scale, the employers had tacitly determined to pay bonuses instead. To revise the official scale would perpetuate high wages after the emergency had passed. Employes being free to get what they could, and the supply of workmen not being nearly equal to the demand, employers had to bid against each other for labor. In some instances wages rose to sensational heights.

In regard to materials the situation was much the same. Delays in transportation augmented production difficulties. The available supply was entirely inadequate for the building program. Deliveries could not be secured without premiums. Heavy expenses were incurred in tracing cars and expediting deliveries. One contractor wrote:

> Your sand and gravel dealers have contracted to deliver this material at $2.50 per yard in December, but of what value is that contract when they are deluged with orders for $3.00, $3.50 and $4.00 per yard? The manufacturer of the material, like the laborer, is human and he will find a way to make deliveries to the last man who pays him best.[18]

A definite policy throughout the industry was essential. At the May, 1923, meeting of the American Construction Council, the question arose as to what concerted action should be taken to stabilize the industry. The council urged retrenchment of construction. It urged speeding up of material production and transportation, coöperation of shippers with railroads to obtain the most and quickest service from the cars in use, and discontinuance by labor of all restrictions on output. Among other things, it recommended that banking interests curtail the financing of speculative building until the close of the summer; that government agencies be urged to delay their work; and that newspapers and trade publications urge the public to postpone construction until early fall and give wide publicity to the trend towards increase in construction costs.[19] The index figure for wholesale prices of building materials was 155 in March, 1922; 156 in April, 1922; 198 in March, 1923; and 204 in April, 1923. In these circumstances the council considered it doubtful whether new structures offered a sound field for investment. "Perhaps never in commercial history," states *Building Age* editorially, "has an industry gone on record to voluntarily slow down or rather take off part of its overload at a time when its product was in such demand."[20]

The response to the warning of the American Construction Council was almost immediate in easing the situation.[21] The *New York Journal of Commerce* reported that the financial agencies were carrying out the action proposed for them:

> Banking, mortgage, and building loan interests are reported to be making it more difficult to obtain money for speculative building. Mortgage companies, which a short time ago were lending 60 per cent and more of the total cost of new building, have cut their loans to 50 and even 40 per cent. The extent to which some of the institutions have gone is indicated in the statement made by officials of the Lawyers' Mortgage Co., who said that the company had stopped all new building loans two weeks ago.[22]

Whether any one agency can be given credit for slowing up building may be open to serious question. Undoubtedly many agencies and individuals called attention to the danger of overexpansion. But not a small part of the credit for developing concerted thought and action on the subject must be given to the council. Of course, building operations were not permanently slowed down, nor was this desired. Once material production and labor supply caught up with the demand, the large volume of building of 1922–23 was soon passed and steadily increased to a peak in 1926.

One of the most definite results of the deliberations of the council is an increasing use of cost and production figures in the industry. By consulting reports by the Department of Commerce, any prospective builder can see just what the conditions are in his own locality, and whether or not the time is propitious to begin his project. If prices are rising and labor is scarce, he will naturally be inclined to hold off, thus easing up the movement of costs; if the contrary conditions prevail, he is naturally inclined to launch his undertaking, thus retarding the downward swing. The whole program is intended to stabilize the course of the industry, to level down its peaks and decrease the extent of its depressions, making a comparatively steady volume of construction.

(d) *Semiannual Trade Reports.* Twice a year the American Construction Council issues a statement on conditions in the building industry, which it gathers by careful and extensive surveys. The statements serve as effective guides to the industry and point out the danger signals. To illustrate the nature of these semiannual statements, we quote from that of October 13, 1924, which, after reviewing the general conditions prevailing in the industry, concluded with the following specific recommendations:

> That with the approach of the Fall and Winter Season all who contemplate construction of any kind give serious consideration to the scheduling of such work as far as possible at an early date in order to take advantage of the relative slack in demand for materials and labor during the winter months. This will not only facilitate the progress of construction during the winter season, but will also assist in getting ready for work later and thus help in maintaining construction activities on a more even keel. The carrying on of maintenance and repair work during the so-called slack season, as repeatedly urged by the Council, will also do much to help in steadying construction activities and at the same time lengthen the working period, thus extending the active season without overlapping or congestion.

The recommendations always aim to follow the movements which the council has initiated and thus create public support of its program. The semiannual statements contain the consensus of opinion among the leaders of the industry as to the tendencies in the situation. They deal with numerous phases of the construction industry.

8. Summary

The American Construction Council has for the first time brought together on a national basis all persons and organizations interested in construction. The organization and activities are a sign of the determination developing in industry to correct its own evils. While the organization of the council has been a progressive step which will eventually provide a national

forum for the discussion of the problems in the industry, thus far its program has been only partially developed. The improvement in industrial relations has not been its special task. As yet, it has been concerned to a large extent with the removal of the practices which have given the industry an undesirable reputation in the public mind.

Whatever success the council has achieved in dealing with the significant problems of the industry has been due to its limited program. It does not concern itself with those problems which are of importance to a particular group; it does not interfere with the work of the many organizations already existing; it merely seeks to correlate their activities by emphasizing common problems and getting concerted action. "The activities of the Council are educational and directed toward the promotion of better relationships rather than actually administrative in nature." [23]

CHAPTER XVII

STABILIZATION OF INDUSTRIAL RELATIONS

PROGRESS in industry is being measured more and more by man's ability to control his industrial environment. The industrial relations problem in the building industry manifests itself in a concerted movement to stabilize employment, wages, working conditions, prices and profits. Stabilization of industrial relations appears to be the fundamental aim of all coöperative activities whether of workers or employers.

What are stable industrial relations? What do we mean by stabilization? By what standard are we to judge whether the relations between employers and workers in a particular industry are sound? Our thinking about the subject of industrial relations has been too intimately tied up with particular industrial disturbances, with specific economic issues, too much clouded by economic prejudices and influenced by personal bias. Each employer and each worker has his own intimate environment from which he draws the answer. There is no logical sequence in the development of industrial relations or labor tactics either among employers or unions. In short, there is no generally recognized standard, no universally accepted measuring stick, to guide one's conclusions on this subject.

It is necessary at the outset to recognize the realities in the situation. Unquestionably, from a purely engineering or economic point of view, the efficiency of the building contractor might be materially increased if he had a free hand in conducting his work, if his operations were not scrutinized by a strong trade union or his initiative limited by its presence. But in fact the employer cannot act without restraint; union rules and practices do limit his authority. And, although several communities have seriously restrained union activities, experience indicates that in many large cities and important building cen-

ters it is unavoidably necessary to deal with building-trades unions. Moreover, an increase in their effectiveness in both organizing the workers and enforcing their demands is anticipated by many observers.

Contributory causes for the strength of unionism are the prevalence of small contractors, the keen competition in bidding, the local character of the industry, the early start made in it by unionism and the disinclination of building owners to support an anti-union fight. Whatever may be the expectations for the future of unionism in other industries, it is generally recognized that, as far as the building industry is concerned, unionism, and even closed-shop unionism, will be a vital factor for many years to come.

1. What Does Stabilization Seek to Accomplish?

Owing to this condition, stabilization seems to have different implications for the various groups in the industry. To one employer stability calls to mind largely one idea — continuity of production. If the daily run of his plant has not been interrupted by strikes, stoppages, lockouts, or other labor disturbances, he compliments himself on his ability to maintain stable relations with his employes. Continuity of production is to him the primary object. The method by which this is achieved is incidental. Closed shop, open shop, American Plan, company union, shop committees, group insurance, premium and bonus payments, scientific management, trade agreements and collective bargaining — all these are simply the working tools with which stability is sought.

Other employers, more alert to the business than to the production aspect of their establishments, think of continuity of production as only incidental to the main purpose of their organization. That purpose finds its answer in the maintenance of high and continuous profits — the end of business, from their standpoint. The relation between continuous production and profits is not necessarily direct. As a rule profits vary directly

with continuity of production; but that under certain circumstances they may vary inversely, the technique of modern business presents voluminous evidence. One has only to observe the methods used by producers generally to be convinced that restriction of output may be profitable. To this group of employers stabilization is defined in terms of the profit account only.

While stabilization of production and profits sums up the employer's idea of stabilization, the building contractor is specifically interested in several essentials. The first is an adequate supply of labor. Disregarding for the moment the fact that the building contractor is making little effort to train or maintain an adequate labor supply, a skilled labor force is of primary importance to him. The seasonal nature of the industry, requiring irregular and non-continuous employment of workers, the relatively greater need for skill in this industry and the emphasis, on account of leasing customs, upon completion dates, make this problem of special significance. The effect of an inadequate labor supply has already been pointed out, as has the relationship of this problem to union initiation fees and membership restrictions.

In the second place, the building contractor is interested in protection from working rules which may impede his operations, raise his costs and prevent him from conducting his work in the most efficient manner. Evidence has been presented in the preceding pages to show the significance of this issue. If it were not for the fear of restrictive rules, much of the contractor's opposition to unionism would be eliminated. Union rules, while ostensibly enforced to protect the economic position of the workers and the bargaining power of the union, inevitably result in extending union control into the realm of management. If one were to single out the leading complaint of contractors in those communities where the union operates, the imposition of working rules would undoubtedly be the most important.

The contractor wants, in the third place, continuity of business. This has a greater affinity with labor relations than at first appears. The opposition to a high wage rate, to union restriction, to uneconomic practices on the part of business groups and to the seasonal character of the industry is in part founded on the fear that these will hamper the continuity of business. Stabilization to the employer comes to mean, primarily, steady business, uninterrupted by strikes either of workers or buyers. In short, if improvements in the industry are to mean anything at all, they should stabilize the production program and assure the contractor more steady business than in the past.

And finally, the employer desires coöperation from his workers. The building-trades employes have been absorbed in the tasks of improving their economic conditions and protecting their organization too long to embark on any extensive program of coöperation. Arousing "company loyalty" has already been shown to be impracticable on a wide scale in the construction industry. Nevertheless, the employer demands that his employes and the union, if he deals with the latter, should recognize the need for coöperation.

To the worker, on the other hand, stabilization connotes a still different idea. From the extent of his agitation against unemployment, one would conclude that stabilization in industrial relations is measured by continuity of employment, by the number of days worked per year. However, a closer view shows that these are ultimately reduced, not to working hours, but to the yearly real wage income. Just as the employer interprets stabilization in terms of profits, so the worker thinks of it in terms of yearly earnings. If he succeeds in maintaining a steady yearly income, he has stabilized his job, his earning capacity and his relations with his employer. The fact that he may have worked only 200 out of a possible 280 working days is incidental. It is the total yearly income by which he measures stabilization, and not the total working time. In one case

he works 275 days at $8 per day, while in the other he works 200 days at $11 per day. The yearly income is not changed. Stabilization has been achieved.

Although stabilization is interpreted in terms of a yearly income, specifically this resolves itself into several requisites. In the first place, the worker wants steady employment. The background and importance of this issue as it affects the building trades are fully treated elsewhere in this book. Unquestionably, the irregular nature of employment in this industry is the cause of most of the controversial problems existing in it. The question of wages is only one. The importance of the working rules is magnified by the seasonal nature of the worker's job and income. The question of apprenticeship and its restrictions is forced upon employers largely by this situation. If building contractors were able to assure steady employment to their workers, many difficulties which the industry faces at the present time would disappear.

In the second place, the worker wants a living wage. This demand in the construction industry is confused with other issues. To the layman the $14 a day wage for bricklayers appears to be higher than a "living wage" ought to be. What little has been accomplished to relate the daily or hourly rate to the yearly income has already been indicated. To the worker, the pressure of unemployment forces constant emphasis upon a demand for a living wage. High hourly rates are counteracted by non-continuous employment throughout the year.

In the third place, a long history of organizational activity has made the building-trades worker yearn for the opportunity to assert some control over his working conditions. The right to belong to a labor union has long been conceded him, although the authority of the union to claim a certain degree of control over the working conditions is still disputed in many localities. The uncertainties surrounding his job, the hazards of his work — occupational diseases and industrial accidents — his wages, his working conditions, together with the unstable character of

his employer, all these point out to the workman the need for protective devices. And experience teaches him that single-handed he cannot achieve these. The right to belong to an organization which he can use as a lever to improve his economic and social position is, therefore, a fundamental right and a means of stabilization.

Which standard of stabilization does the building owner accept? What does he mean by stabilization? Obviously, he is only indirectly interested in the profits of the manufacturer. Neither is his interest in the wages paid to the worker any more keen. His own position in industry is relatively passive. As a rule he is not organized and lacks an effective method of voicing his demands. The nature of the product reduces the possibility of a successful buyer's article. The owner's dependence upon the productive factors varies, of course, with each industry. In the building industry this dependence is very great. From the nature of the product, stabilization in industrial relations implies to the consumer one thing — continuance of production. Stabilization as conceived by this group does not necessarily imply that production is regularized throughout the year. On the contrary, the consumer's demand creates an industry operated largely on a peak-load basis for five months each year and on a 40 to 50 per cent efficiency basis during the remainder of the year. Stabilization to the consumer means readiness to serve at any time. It implies an industry without strikes, lockouts, or restriction of output. It calls for the availability of the productive factors whenever needed. If the employers and workers are always ready and willing to work, then the industry is stabilized.

This is in part an engineering-efficiency concept. While one may grant the general interest of the public in an efficient construction industry which renders a good return for the money invested in buildings, many building owners regard wages and profits as incidental to their operations. Continuous production is the ultimate aim. If this is doubted, one has but to ob-

serve the price of stabilization where continuity of production is achieved. The price paid for peace is frequently excessive, if judged from any other point of view than that of the consumer, who thinks of peace only in terms of continuous production. Peace in the building industry of our large cities is seldom unaccompanied by collusive arrangements, uneconomic practices and exclusive agreements, which, through various devices — rigging of bids, "snowballing" of wages, restriction of output by employers and workers, cutthroat competition in some branches and no competition in others, and similar methods — raise the price of the product to a point where, at times, the productive processes are totally stopped, in spite of the dire need for housing and other facilities.

More specifically, however, the public demands the elimination of those forms of economic waste which enhance building costs. Much of this waste is due to inefficient management, which does not avail itself of mechanical improvements and expediting devices; to an antiquated training system which permits poorly trained workers, contractors and managers to operate in an industry where skill and quality are essential; to a multiplicity of small construction units hampering the solution of labor relations problems; to burdensome overhead costs in slack seasons when activities are suspended. The consumer wants management and men to work in closer harmony instead of being organized to fight. Such a program would lower building costs without reducing the worker's standard of living.

2. Obstacles to Stabilization — Progressive Tendencies

The common requirement of the three groups, labor, employers, and the public, is stabilization. Only through continuous production is it possible to conceive of continuous profits and steady wages, low cost and good quality. So insistent is the need for stabilized production, that on many occasions the public does not hesitate to pay whatever price is

demanded. But at this point a contradiction appears. For in spite of the apparent willingness to pay the price of peace, the building industry is periodically torn by chronic industrial warfare, resulting in complete cessation of building operations. Highly organized as it is, the building industry suffers recurrent stoppages on account of disagreements between the workers and their employers. "Free and open competition" results in price wars among manufacturers, dealers and contractors. At critical times industrial conflict interrupts continuous production, notwithstanding arbitration machinery pledged to maintain peace. In short, the building industry in many instances fails to meet the consumer's idea of stabilization. What are the disturbing factors? What obstacles to peaceful industrial relations appear? In the building industry a number of important issues militate against stable industrial relations and interfere with the continuity of production. These appear in varying degrees of intensity at different times. A review of the preceding chapters will show that there are six disturbing issues: jurisdictional disputes, seasonal construction, working rules, wage conflicts, business competition and weak organization of employers.

(a) *Jurisdictional Disputes.* Perhaps of primary importance among the disturbing factors are jurisdictional disputes. Employers are only indirectly involved in the causes of disputes, although they are very vitally concerned in their solution. It has been estimated by contractors and labor leaders that before 1919 between 80 and 90 per cent of all strikes and lockouts in the building trades of the larger cities were due directly to jurisdictional disputes between unions. Technical changes in materials, methods and processes have continued at so rapid a pace that it has been impossible to stabilize the claims of the several organizations in the industry. The paradox of the situation exists in the fact that controversies between the unions themselves should constitute the largest single cause of instability.

Since this has been the most troublesome question in the industry, organized employers and workers have been giving this problem joint attention for several years. The various agencies established to deal with the issue have already been appraised. It has been estimated that since 1919 about 75 per cent of the jurisdictional disputes have been eliminated, chiefly through the efforts of an inclusive industrial organization, the National Board for Jurisdictional Awards. The recent repudiation of this Board and the likelihood that its past decisions will be disregarded, as they already have been with regard to one union, again bring this problem to the foreground.

It appears certain that as long as this issue remains unsettled, as long as contractors, owners and even workers have no assurance that agreements and wage scales will not be violated by inter-union jurisdictional squabbles, stability in industrial relations is impossible. Irrespective of the justice of some claims, and disregarding, for the moment, the prospect that such disputes will appear to no less extent in the future, as a result of further improvements in mechanical processes and materials, the continued danger of stoppages is a liability of which the industry must dispose. A review of the adjusting machinery used in the past, from that of the local arbitration board to the Building Trades Department and the National Board for Jurisdictional Awards, emphasizes that the organization, composition and methods of these agencies are no longer the vital questions. Every conceivable form of adjustment has been tried. While some agencies were more successful than others, none of them has received sufficient recognition to solve this vexing problem. It appears, therefore, that the limiting factor is not to be found in the particular type of agency established. Other obstacles are present.

The solution of jurisdictional disputes, in the first place, requires the existence of some permanent adjudication machinery. The specific composition of the adjustment agency, in so far as it includes representatives of employing and professional

groups as well as labor — or labor only — is relatively unimportant. It is only imperative that all labor unions be represented. It appears that certain labor organizations opposed the recent Board of Awards on the score that the employers were only indirectly interested in these disputes, that they did not coöperate in enforcing the decisions, that they fomented disputes on account of wage differentials and that some of them through their association had been sponsoring the open shop. However, it is doubtful if these objections were fundamental and whether their absence would have made the board more successful. Employers, architects and engineers would be willing to forfeit their right to be represented on such adjudicating boards if their absence would make a solution more assured.

In the second place, experience indicates that only adjudication machinery established on a national basis can function permanently and effectively. It is admitted that such national control over jurisdictional disputes will encounter opposition from strong local organizations which have been relatively successful in handling these disputes. Certainly, the international unions will give no support to any adjustment agency unless it is organized on a national basis. To overcome the opposition from strong localist centers, it might be necessary to make decisions applicable only to certain local zones, but this is not to eliminate the national character of the jurisdiction nor reduce the power of the national unions. The most definite lesson gleaned from experience during more than a quarter-century of jurisdictional adjustments is that local claims and local customs have been disconcerting influences rather than stabilizing forces.

Adjustment machinery is but one step in the right direction. The National Board for Jurisdictional Awards offered such machinery. The primary cause for its failure was not so much the particular issue which resulted in the repudiation of the board as the total lack among certain labor unions and employing elements of the spirit of coöperation so essential for successful

adjudication. To be sure, the decisions of the board were in part responsible for this attitude of suspicion. But its history and that of its predecessors indicate clearly that union leaders were unwilling to meet their antagonist halfway, to think in terms of the welfare of the industry and to temper their own claims to the interest of the whole group. Unless the union point of view is sufficiently tolerant and sufficiently broad to sacrifice temporary political gains, jurisdictional disputes will continue to be the problem most vexing to the industry and most dangerous to the existence of unionism.

Finally, there is another aspect of this problem which is irritating to the employer and results in much dissatisfaction. Jurisdictional disputes must be clearly distinguished from jurisdictional rules. The elimination of strikes which result from the former is sought by the various adjustment agencies which have been established. Jurisdictional rules, however, do not come within the purview of the adjustment boards. These rules are not unimportant. Employers who are subjected to but few jurisdictional strikes are still troubled with the customary jurisdictional quarrels, and while these are not permitted to get to the point of open warfare, there is an infinity of rules delimiting the sphere of activity of each craft, seriously limiting the managerial scope of the employer and rendering more costly the performance of work. While to the employer the strike is the last straw in jurisdictional matters, the strike, in the long run, is no more costly and unsound than the allocation of work on the basis of rival craft claims. What little has already been done to reduce friction resulting from these rules has come about through the combining of related trades. Progress in this direction, however, has been very slow.

A broader point of view may eventually develop a program for the consolidation of trades into several basic groups. The obstacles to amalgamation at present are so many that little can be hoped for in this direction for many years to come. But the development of an industrial point of view, as distin-

guished from the narrower craft standpoint, will undoubtedly prepare the ground for several beneficial consolidations of present conflicting groups and thereby reduce in the most effective manner the basic causes of jurisdictional conflict.

(b) *Unemployment.* Second in importance among the disturbing factors is the seasonal character of the industry. This one problem not only aggravates other problems, but is instrumental in preventing a remedy. Intermittent employment intensifies industrial problems, particularly disputes concerning wages. It makes necessary the constant drive for higher hourly wages to maintain an adequate annual income. Seasonal construction not only reacts unfavorably upon the working group in the building industry, but has a similar influence upon other elements functioning therein. Regularization of employment in the production of building materials and building equipment, and in the work of contractors, engineers, architects and manufacturers is made difficult. The problem of labor supply is at times intensified because the industry fails to attract enough workers on the basis of a nine-month working year. As a result of the highly seasonal character of the industry, construction has been carried on at 75 per cent efficiency and at a cost above what it would be if regularization in production and employment were achieved.

Only in recent years have the different groups in the industry begun to appreciate the havoc which seasonal construction has been playing with stable industrial relations. The first essential was to study the problem and to measure its nature and extent. The approach to a solution was an organized effort to educate every group which came into contact with building construction as to the real causes of unemployment in the past, and the possibility of regulating it. Although it is too early to predict the outcome, the result already indicates that the continued functioning of the joint industrial agencies will put the building industry on a twelve-month basis. The limiting factors in the improvement of this situation appear to be the pres-

ence of numerous small contractors whose managerial efficiency and technical equipment are not adaptable to a winter building program. The second limitation is the difficulty of educating the building public as to the feasibility and advantages of winter construction.

Various organizations in the building industry are including in their activities this educational attempt to regularize employment throughout the year. With the success of such a program will come an opportunity to reëxamine the wage schedules and differentials existing in the various trades and to correlate wages with output. Stabilizing employment throughout the year will also react beneficially upon labor supply and apprenticeship training. Not only will it be simpler to attract additional recruits to the industry when needed, but the increasing usefulness and efficiency of the present working force will relieve the pressure for an increased labor supply during peak periods. The highest possible efficiency requires that the whole productive capacity of the industry shall be continuously engaged and absorbed. The overbearing fear of unemployment must be removed before the worker can be expected to give his best. Reducing the hazards of seasonal unemployment becomes a primary essential in any program of improving industrial relations.

(c) *Wage Disputes.* Largely resulting from seasonal unemployment, the wage conflict in the building trades is next in importance as a cause of unstable industrial relations. Jurisdictional disputes are responsible for most trade strikes and stoppages, but conflicts over wages are a fruitful cause of general strikes affecting an entire market.

One of the most prolific causes of wage conflict is the prevalence of differentials in wages for different trades in the industry. These differentials are not based on extra competency, and are not a remuneration for special skill. In only a few cases do they represent extra hazard, and in fewer yet do they give remuneration for irregular employment. In most instances

the differentials were secured as a result of a special bargaining advantage, or through an alliance between several trades which maintained them. In many localities they not only are customary, but their existence is recognized in agreements, and changes in the hourly rates of important trades result in an automatic revision of rates for other trades, in order to maintain the recognized differentials.

Another characteristic of the wage question in several trades is the existence of bonuses. "Snowballing" of wages is a common practice which often upsets the established wage scales. Its prevalence arises from the necessity of offering an incentive greater than the standard rate provided for in the agreement — an incentive made necessary by the strain on the labor supply during the summer months. A bonus practically changes the differentials in the various trades, creates a new bargaining base and inevitably results in wage strikes in an effort to "write" the bonus into the recognized scale.

The most serious difficulty caused by the wage disputes is the frequent disruption of adjustment machinery when agreements expire and demands are made to change the wage scale up or down. The 1921 struggle in Chicago, a struggle which is only now nearing its end, the conflict in San Francisco in the same year — which, according to many observers, is not yet over — and the struggle in Cleveland in 1921, are only three illustrations of occasions when the adjustment machinery failed to function in a wage dispute. Incidentally these three cases involved demands by employers for wage decreases, to take account of changes in the cost of living, or for other reasons. Demands for wage increases in 1918 in the same cities also resulted in important strikes. In short, at crucial times, when the adjustment agencies are most needed, the agreements break down and strikes follow. What can be done to reduce the hazards of stoppages on this account?

Obviously, no one expects a "permanent" solution of wage disputes. It is doubtful if such a solution is desirable. Sta-

bility in wage rates is unthinkable either from the point of view of the worker or of social progress. Changes in productivity, in the profitableness of the industry and in the bargaining power of the workers' organization all ought to produce changes in real wages. Whether such revisions can be secured without a resort to direct action depends somewhat on the ability and willingness of both workers and employers to conciliate their differences or to abide by the verdict of arbitration. But, in the building trades, arbitration is somewhat distrusted, especially by the unions, and is used when one or both of the contestants are desirous of avoiding an open break. Consequently, wage rates are determined mainly by economic power, and resort to arbitration is had only when direct action is not likely to secure results. The various devices perfected in several industries for correlating wages with changes in the cost of living, the productivity of the worker and the profitableness of the industry, have only a limited application in the building trades. The industry is not organized in such a manner as to permit correlation with any factor, except perhaps with changes in the cost of living.

No organized effort has been made to settle the question of wage differentials. The 1920 agreement in New York City and the agreements in Chicago in 1918 and 1923 abolished the differential wage scale between trades and substituted a blanket wage agreement, which classified the different trades into skilled, unskilled and semiskilled, providing a uniform wage for each trade in the group. While this change had some salutary effects, the system has since been abolished in the New York building trades. The present method in most unionized localities, which is rather closely followed in unorganized cities, is to pay customary differentials to the different trades. But the frequency of disputes arising on this account points to the need of establishing the differentials on a sounder basis than exists at the present time.

The question of bonuses is one that does not easily lend itself to solution. Thus far only a few trades recognize it as a problem of importance, and pledge themselves to prevent the "snowballing" of wages. It is doubtful, however, if an agreement recognizing the evils prevalent in a practice of this sort will be of any value during the height of the building season. The problem is due to the maladjustment between the demand and supply of labor, and it can be solved only by extending the building season throughout the year. The supply of labor would then adjust itself, and the need for bonus payments would be eliminated.

Finally, the most pressing problem arises from the failure of the adjustment machinery to function at the crucial time in a wage dispute. The organized agencies for dealing with these questions on a trade and market basis have already been described. The usual method of dealing with wage disputes is to submit them to arbitration. But on several important occasions arbitration awards have been disregarded. Generally unions hesitate to arbitrate a wage dispute and prefer to rely on their bargaining strength.

What is needed in the first place is a careful study of the unemployment problem. This is to determine in a scientific manner the relationship between the hourly rate and the yearly income of the worker. In the second place, a greater willingness is necessary on the part of both groups to recognize changes in the cost of living and to correlate them with wage rates. Undoubtedly, a long-time agreement is of great advantage to the employer and to the industry. The difficulty arises when sudden changes occur during the life of the agreement or when the agreement expires. If the habit of collective bargaining is well fixed and the strength of the contending factors is comparable, then failure to conclude an agreement may result in no interruption of work, but merely make the eventual wage settlement retroactive. That occurred in New York City in 1922. Reliance on agreements and willingness to accept decisions of

arbitrators are the results of a long process of education and effective leadership. The building-trades workers and employers have not yet achieved this high standard of mutual confidence. Hope lies only in the development of arbitration machinery and in the education of employe and employer to the necessity of respecting arbitration decisions.

(d) *Working Rules.* Probably no other issue has received so much publicity as a cause of industrial disputes in building construction as the "barbed wire entanglements" known as the working rules of unions. To these have been attributed the high cost of building, the shortage of building mechanics, the opposition to the closed shop, and several costly strikes in various building centers.

Leaving out of consideration for the moment the effect which these rules have upon the initiative of management and the progress of the industry, they have been responsible to only a limited degree for unstable industrial relations. To reiterate, the major cause of interruptions of production in the important building centers since 1905 has not been working rules, but wages and inter-union disputes. Rules of labor unions were an issue in the early stages of unionism in the building trades. Once recognition was secured, working rules assumed secondary importance as a direct cause of strikes. To be sure, where they are restrictive, they do not enhance the cordiality of relations between the unions and employers, but in few instances have they been responsible for severing joint relations.

This is not true, however, of the open-shop centers where the dominant issue is still the right of the employer to control his own establishment. Union rules are a recognition that this right is not absolute. But for unionized communities generally, working rules — control over the job, the right to hire and fire, working conditions, and so forth — have not entered extensively into the causes for unstable industrial relations.

But to achieve stabilization on the basis of costly working rules which impede the technical and managerial progress of

the industry is as undesirable as to stabilize an industry on the basis of low wages and exploitation of labor. Working rules and trade practices have equalized the competitive struggle, stabilized conditions under which all employers must operate and protected the industrial position of the workers. In fact, the stabilized and responsible contractor looks with favor on rules which restrict the operation of the speculative builders. While working rules have these beneficial effects, they have nevertheless introduced practices of a wasteful character, have enforced regulations which limit the individual output of the worker, have restricted the introduction of labor-saving devices, limited the power of management to introduce changes in methods which would have increased the efficiency of the industry and have retarded production by maintaining uneconomic jurisdictional classifications.

The question then arises: what can be done to reduce the harmful effect of these rules upon the progress of the industry? Is it possible to retain the regulatory character of the desirable working rules and to eliminate those which are essentially restrictive?

In the first place, it is essential to recognize that no restrictive rules can be eliminated if the conditions which originally brought them into existence are not removed first. If a worker knows from experience that the first snow of winter will terminate his job for a period of many weeks, rules and regulations to the contrary, he will gage his efficiency during the summer months so as to prolong the amount of available work. Restriction of output will be as prevalent without rules as with such rules. If employers will flood the trade with "green hands" and young boys, in order to train a labor supply sufficiently plentiful to defeat the labor organizations in the next dispute, the unions will restrict entrance to the trades and regulate strictly the number of apprentices. Similarly, the employment of pace setters and the introduction of labor-saving devices, without any thought as to the welfare of the workers

whose skill is made less valuable and whose labor is probably displaced, will result in rules limiting production. These are the conditions which prevail in many building trades. It is, therefore, not surprising that building mechanics are arbitrary in their restrictions. The industry is highly decentralized. In many trades and localities the general contractors and subcontractors are "labor-brokers"; labor is the only cost of the subcontractor and profits are not infrequently proportional to labor cost. As a result, the rules of the union are protective devices to prevent highly competitive forces from endangering the standard rate of pay and other "union conditions." Many of the regulations enforced at present or in the past are closely related to objectionable conditions found in the industry, and correction of such conditions is the first essential toward a sane approach to this vexing problem.

Before the unions can be expected to relinquish their restrictive practices, some assurance must be given that the workers will not be required to bear the entire cost of industrial changes and will be protected against the hazards which exist in the industry. In other words, what is needed as a first requisite toward more efficient operation is stabilization — stabilization of wages, of employment, of working conditions. Unless these are assured, to talk of eliminating rules which have their inspiration in unstable working conditions is to overlook the cause and to deal only with the effect. To give such assurances requires that the stabilization program be a coöperative effort of contractors. Unfortunately, thus far, contractors have shown little zeal in controlling these unstable elements in the industry. To many contractors it is still a question whether stabilized employment, fewer restrictive rules and higher individual efficiency are better than uncertainty of employment, restrictive rules and lower efficiency. Certainly, the contractors' hesitation or unwillingness to organize in order to control the worst features of a one-sided determination of working rules is only one indication that, as a rule, they are indifferent to the prob-

lem. Many still prefer to pay "hold-up" rather than association dues.

Obviously, in view of the almost complete organization of building-trades workers in many leading cities, restrictive working rules can be eliminated only by improving the type of collective bargaining. In many places it is conducted minus the usual accompaniments of equality and discussion. The claim to "bargaining" must in many instances be seriously discounted, as one-sided organization does not produce it. Although the contention of open-shop employers that collective bargaining in the building trades is nothing more than a demand followed by a surrender is untrue for the most part, it is true that the lack of organization among building-trades employers gives the unions a preponderance of power, and that there is no force to compel them to relax their restrictive rules, or to change their point of view with regard to them. A shrewd union business agent well described the situation when he said: "Collective bargaining is where the employer and employe sit down on opposite sides of the table to talk things over and the side that is the strongest gets what it wants."

Unions look upon their rules as a part of their industrial constitution, embodied in a trade agreement, and while they concede that the more flexible terms of the agreement may be changed, they feel that the rules should be modified only after conclusive proof of necessity. Since rules seek to protect the members of the union against sudden changes in working conditions which might endanger the tenure of their job or the skill of their trade, any effort to abolish or change them is stubbornly opposed. It is this fundamentalist attitude on the question which often makes working rules an obstacle to changes in methods of production and to the introduction of labor-saving devices. This is the reason why to the employer they appear vicious. Employers desire that rules shall remain flexible and changeable with industrial conditions — a part of the statute law of industry, and not of the industrial constitution as the

unions would have it. These divergent points of view, when taken together with the supremacy of the building-trades unions, explain the existence of many essentially restrictive rules in spite of collective bargaining and annual and biannual revision of collective agreements.

This situation points to two courses of improvement. The nature of collective bargaining as carried on in the building trades must be materially improved, in order to produce the bargaining process it is intended to be; also the subject matter of collective agreements must be significantly enlarged.

The preponderance of power on the part of organized labor in many cities has made relations with the employers arbitrary and dictatorial. In these localities collective bargaining has not been conducted on the basis of discussion and deliberation. The collective agreement has only in a few instances been the result of a deliberative proceeding where the demands and counterdemands were discussed and weighed by equals. On the contrary, in too many cases collective bargaining has been carried on in the San Francisco fashion, and the agreement has resembled a union ultimatum.

To blame labor unions for this deficiency is unfair. The contractors have been unwilling to accept the obligations and self-discipline of group organization which inevitably accompany association membership. Only when a larger number of building contractors accept the principle of coöperation, and sacrifice part of their individualism in dealing with the labor organizations, will real collective bargaining be possible. Only then will there be the "respect tinged with apprehension" which the New York employers discovered to be the first essential for stable industrial relations. When that comes about, when building contractors are willing to assume the responsibilities of their group organization, collective bargaining will make possible a gradual elimination of many of the restrictive rules which prevail in some trades.

But organization of contractors is only one necessary reform. At the present time the attitude of the building-trades unions is still largely obstructive. They are still concerned with defending the elementary conditions of the job. The psychological attitude developed in the process is defensive rather than constructive. The working rules are, therefore, a number of "don'ts" imposed upon the employer as a defense against the uncertainties of the job. Building-trades unions in many localities must still win recognition and secure the acceptance of collective bargaining.

Where recognition has been secured and where collective bargaining is the method of conducting joint relations, the combative attitude of unionism in the building trades has been somewhat relaxed. Direct action, such as strikes and lockouts, has largely been superseded by judicial machinery functioning on the basis of written trade agreements. But the union is still merely an "instrument of protection and conservation." Its primary object is still to "make sure that the winnings of labor are not filched from it and that the working terms which the employer makes are kept." The method is still that of a policeman, a vigilance committee, on the lookout for violators of the standards agreed upon.

As a result, the subject matter of collective bargaining is strictly circumscribed. The functions of management and labor are definitely separated. This division, the result of many years of development, restricts the worker's interest in the job to getting all he can, and forces upon him the attitude of giving as little as possible. This point of view is a direct outgrowth of the conditions prevalent in the industry — chronic unemployment, cutthroat competition, and rapid changes in methods of production, which reduce the bargaining power which the worker's skill should give him. His response is to restrict output and nurse the job along, to check changes in management and methods and to barricade the job with protective weapons tending to make it more secure.

The unions can themselves contribute much to the development of the psychology and methodology of reducing the hazards to which both workers and employers are subjected. In those communities where the union can relax its vigilance without fear that a rear attack from employers will destroy the desirable working conditions already won, there is room for the development of constructive agencies for joint coöperation in handling questions of labor supply, labor turnover, apprenticeship, craftsmanship, safety, public relations, efficiency and improvements in methods of reducing economic wastes. There is an urgent need to widen the scope of collective bargaining to include problems which have heretofore been almost entirely neglected or considered outside the realm of a worker's interests.

That there are many problems which not only lend themselves to joint coöperation of unions and employers' organizations but require it is too obvious to need lengthy elaboration here. The problems of industrial education, the responsibility for poorly and inadequately trained workers, for a large accident toll and for wasteful practices in labor management rest on both sides. These will never be completely solved in this industry until the solution is concerned less with what the employers can force out of labor, and more with the degree of constructive coöperation which can be directed toward a scientific determination of minimum conditions. How much can be done depends only upon the character and sincerity of the leaders of the local movements involved.

Take the question of standards of output. Much of the controversy as to the extent of restriction is based on ignorance as to what a "fair day's work" is in terms of physical output. Only in isolated instances have standards of output been determined as part of the collective agreement procedure. This is in part due to the unwillingness of unions to define the working day in those terms. If, however, the unions could have confidence in the good intentions of their employers, much

misunderstanding would be overcome. The principles of joint industrial coöperation could be extended to the realm of management by including such matters as material deliveries and industrial processes.

In short, in those localities where "recognition" and collective bargaining are established facts, much can be done to reduce costs, improve efficiency, regularize employment and eliminate the industrial risks normally facing the worker, by extending the scope of collective bargaining beyond the mere defensive aspects of the present agreement. Joint coöperation would present the opportunity for the elimination of the restrictive rules now prevalent and make possible the organization of the industry for greater service. Under the present system a forward move by labor to improve conditions is opposed as a matter of duty by employers; and improvements in the direction of increased production and efficiency are counteracted by the restrictive regulations of the trade unions.

There are many limitations in the development of such a constructive program. The psychology of warfare is too deeply ingrained to be eliminated in a short time. But a more significant limitation lies in the fact that the constructive coöperation of unions cannot be secured until definite guarantees are given that their interests will be sufficiently protected. As it is, several factors stand definitely in the way of improvement. The fear of unemployment is undoubtedly the most important one. If coöperation would increase the efficiency of the industry without giving the workers any of the benefits either of higher wages or a longer working year, obviously the union would have no incentive to relax its working rules.

In many cities the organized workers are protected by the established adjustment agencies against the abuse of power by the employer. But nowhere has this negative purpose of protection been translated into positive action for constructive coöperation. It is only as a result of an intimate and continuous association of management and labor, of thorough organ-

ization of both contractors and workers and of the adoption of a wide program of industrial coöperation that the wasteful regulations which grew up with the industry and remained in spite of many years of collective bargaining can be eliminated.

(e) *The Closed Shop.* Obviously, the contest over the closed shop will be a bone of contention in many localities for years to come. By the unions in the building industry the closed shop is considered as an absolute essential to existence, and it also has many proponents among the employers in several unionized building-trades centers. This support is based upon the belief that some enforcement agency is essential to equalize competitive conditions, at least in so far as these concern wages, hours and working conditions. The function of the union in this respect is to police the job, and to penalize those who, by paying less in wages or working longer hours, threaten to undermine union conditions. The stabilized employers, who are equally endangered by the operations of the small unorganized contractors, have willingly accepted the union as a policeman and profited by its operations. Therefore occasional opposition to the closed shop from unionized cities arises, not from a desire to destroy the union monopoly, but rather in an attempt to correct a particular abuse prevalent at the time. The chapters dealing with the history of industrial relations in New York, Chicago and San Francisco have already detailed the situation in those cities with regard to the issue of the open and the closed shop. In the two former cities the open shop was rejected by the contractors on more than one occasion, and in San Francisco rather drastic means were necessary to cajole the employers into accepting the American Plan.

The acceptance of the closed shop by many building-trades employers results from their experience that the introduction of the open shop has meant a constant fight against the union labor organizations. This task has not been an easy one. But more difficult has been the maintenance of the open shop after victory is attained. At the same time, many employers contend

that in such a contest a victory for labor has made the unions more cunning and skilful and has even increased their aggressiveness. The closed-shop employer, therefore, conceives the solution to be, not in establishing the open shop and giving full rein in the competition for labor, thus making more uncertain the labor cost in the industry, but rather in an internal house cleaning of the union, eliminating from leadership the unscrupulous element which at times dominates building-trades affairs.

However, not all localities have accepted this solution. Some large cities, and most smaller centers, still contest union control. The arguments for such resistance and the issues at stake have been treated fully elsewhere. They are concerned primarily with the fear of the employer that the closed shop will deprive him of the right to run his own establishment; that a complete union monopoly of the labor supply will interfere with the detailed job processes and make the task of efficient management more difficult. Obviously, stabilization of industrial relations must, therefore, be considered only with regard to particular cities where joint relations have already been established.

For these and for many open-shop cities better relations must await a shift in the point of view of the unions. That they can in many instances relax their demand for a monopoly is undoubtedly true. It is well known that some union officials in this and other industries see in the open shop an opportunity to "sell" unionism, on the basis of the services it performs, which is better than the opportunity to force unionism that complete job control gives. To these a partly unorganized industry presents a constant challenge to improve conditions and extend the organization, and out of this contest comes the material for a healthy organizational development. But in the building trades this point of view must await not only an attitude of employers more favorable to tolerance and to dealing with labor organizations, but also an improvement in the com-

petitive struggle in the industry, which makes unorganized labor bear the burden of wasteful practices.

(f) *The Competitive Structure.* The competitive structure of the building business presents another factor disturbing stable industrial relations. The small producing units engaged in a fierce competitive struggle with each other have been largely immune from the more constructive business practices and the more efficient construction methods. Small employers, constantly in danger of economic extermination, have little interest in stable industrial relations. Economic waste as a result of unstable labor relations becomes insignificant when compared with the huge wastes caused by inefficient methods and by the uneconomic practices abounding in almost all trades. Their bearing on industrial relations problems has already been indicated. Any improvement in the latter must be accompanied by a general improvement in the competitive structure of the industry. Cutthroat methods of competition for jobs among contractors result almost directly in union practices designed to protect workers against their effects.

The average building contractor does not use cost accounting in his calculations. Barring the more efficient organizations, rule-of-thumb methods characterize every construction operation. Every trade in the building industry is still swamped with a host of contractors who lack modern methods and appliances, estimate on the basis of guesswork and generally have not been affected by the scientific progress which has revolutionized the construction processes of the more efficient contractors. While to the ordinary observer these drawbacks do not directly affect industrial relations, the fact remains that many of the cumulative irritations that go to make up the large aggregate of industrial unrest hark back to inefficiency in the mechanical processes under which work is done. It is, therefore, imperative that, in order to reduce friction from this source, contractors should adopt more generally the improvements now available; introduce more efficient machinery; im-

prove the methods of handling labor; reduce the loss of time resulting from failure to coördinate job schedules and material deliveries; eliminate unnecessary operations; and generally improve the conditions under which work is done, by applying scientific principles of management to their construction operations. The correction of these conditions is a slow process, fortunately already under way. Through the increasing activities of trade associations of contractors and dealers, competition is being minutely examined with a view both to eliminating the more wasteful practices and also to giving wider application to the practices which are most efficient.

To reduce waste and reduce workers' grievances, then, not only must contractors improve their job organizations, but they must also modify many of the practices which force upon the industry the kind of competition which recently has been prominent and must make these practices saner. They must show themselves less given to price cutting on one hand and anti-social combinations for price maintenance on the other. Trade associations have been slow in developing coöperative activities directed toward controlling the more flagrant abuses of competition. But only through their work can the wasteful and anti-social practices be changed, and competition raised to a level where it does not impair efficiency in the industry.

(g) *The Unorganized Employer.* The limiting factor to stable industrial relations at the present time is found in the lamentably disorganized condition of employers. Notwithstanding the significant progress already made in the large cities, in uniting the building contractors, the vast majority have not yet been converted to the necessity of group organization. In the building industry, probably more than elsewhere, the small non-federated employer is an obstacle to any scheme seeking to improve the organization of the industry. Not only is his problem neglected, but frequently abuses which occur on the side of the unions are due in part, at least, to the absence of organization on his side. The movement toward organization is pro-

gressing at a slow rate; the diversity of interests in the different groups of contractors and the total absence of "class consciousness" among them give rise to dissensions at a time when unity is needed most. Only in recent years have building employers been educated to the value of group organization. However, a greater degree of solidarity is still necessary before substantial progress will be possible.

The ignorance and provincialism of many contractors is a drawback of no small significance. Further, building-trades employers have no deep interest in industrial relations, and cooperation with other groups is difficult to secure because there is no common bond between them. Costs are of no interest to contractors, so long as these can be reasonably predetermined. All that the employer wants to be assured of, in the last analysis, is that his competitors are working under the same conditions as he. Further progress, therefore, must await a change in the point of view of contractors and an increase in the effectiveness of their organization. But to assume that the meeting of opposing forces well organized and ably led will eliminate disagreement and warfare is to overlook many important factors. Such meetings in the arena of negotiation have not yet lost their resemblance to a battle line. But it is not inevitable that the greatest measure of accomplishment should be attained by way of violent conflict. "The severed clash of divergent interest may take place as people sit around the table and discuss matters with facts and figures in their hands and not with their hands clenched in a fist." This kind of fighting makes for better understanding of the problems of the industry and avoids physical conflict only in proportion as both sides are effectively organized.

While the workers in the building trades have solved their problem of organization to a greater degree than the employers, improvements in union policies can also aid in stabilizing the industry. The elimination of inter-union disputes is an important improvement already discussed. The abuses resulting

from the indiscriminate use of sympathetic strikes can and should be curbed, after the conditions making their use necessary have been removed. This will greatly reduce the number of stoppages in the industry. Similarly, radical improvements can be made in the leadership of some building-trades unions, particularly in the local groups. With few striking exceptions the leadership of the building-trades unions has been narrow and selfish. The factors inherent in the building business have made this type of leader possible. Technological developments have not threatened craft unionism in this field as they have in numerous other lines, such as the metal trades. As a result the greatest stimulus to a constructive outlook by officials of the building-trades unions has been eliminated. An improvement in the type of leadership is necessary, not only to eliminate the more unwholesome practices prevailing in many localities, but also to foster a broader point of view in regard to industrial relations. The increasing influence of national officers over local affairs promises to standardize conditions and practices and to exert a more enlightened influence over the local unions.

3. The Need for Organization

One fact stands out clearly. The employer is absolutely helpless in an individual attempt to solve any major problem on his own account. Leaving out of present consideration the fact that he is dealing with a well-knit organization of his employes, he is beset by problems the very nature of which requires group control. No individual effort will regularize building construction, solve the apprenticeship problem, standardize the production of building materials, eliminate uneconomic competitive practices or control the many variable factors which enter into labor relations. From the beginning of the productive process in building, the contractor relies upon the coöperation of other factors. Without such coöperation from the material dealer, the banker and labor, his building project

cannot reach completion. The same is true of any problem in the industrial relations aspect of his establishment. Not until the construction industry solves the important problem of organization will a sound approach to the major ills of the industry be made. Once that is solved, a constructive program will be based on a complete recognition of all the organized groups as component parts of a large industry, whose participation in an all-inclusive industrial organization is essential to stabilization. There not only is need for united effort to remove the fundamental causes of instability, but it becomes more and more apparent that a constructive program in labor relations is inextricably tied up with a constructive program in the other fields.

It might be objected, however, that a more complete organization of the several groups operating in the industry will not in itself solve the problem. For in one respect, at least, the lessons of collective bargaining have been emphatic. The chief parties at interest, labor and the contractors, have frequently engaged in practices which not only were costly from the public point of view, but were unethical as well. Left to themselves, they have maintained exclusive agreements, enforced uneconomic practices and unduly restricted competition. While the sort of stabilization they have achieved has served the selfish interests of the groups involved, it has not been to the benefit of consumers generally, and the building owner and rent payer in particular.

This situation, which many believe to be irremediable in this industry, has brought forth the suggestion that only the presence of a "third party," a private or public agency not directly interested in the building business, would remove from the industry anti-social practices which now prevail. The function of such a body would be to supervise the relations between the unions and employers, to the end of placing these upon a higher ethical plane and injecting the public interest into the affairs of the industry.

How far a public body composed of men who are not an integral part of the building industry can influence conditions in the industry is a debatable question. The experiences of the Citizens' Committee to Enforce the Landis Award in Chicago from 1921 to 1927, and of the Industrial Association of San Francisco since 1921 offer only an incomplete answer to this question. In the former case, while many practices of an unwholesome character have been removed from the industry, the contractors, who had sufficient reason to be grateful for the activities of the committee, repudiated its program and entered into agreements with the unions — agreements which contained provisions opposed by the committee. In the latter case, reforms in the practices and methods of the industry have been secured only by the removal of the labor unions as an effective power in influencing working conditions. In both instances the "third party" embarked on a program which antagonized the unions and many of the contractors, and has thereby removed the possibility of securing coöperation among the parties directly involved.

To be successful, intervention in the affairs of the building industry must take into account the lessons already indicated by efforts at improvement. Probably the biggest liability of any agency seeking to reform the methods of the industry lies in its assuming an anti-union character. Equally important is the danger of stripping the parties directly interested of any control over building affairs and transferring such power to a "Citizens' Committee," whose presence in the industry is at best of short duration. In the last analysis it is not possible forever to deprive the contractors and workers of the right to determine the conditions under which they will operate. To attempt to do so, even temporarily, is to incur their opposition and provide an incentive for a return to the old methods of collusive dealings. It is obvious, therefore, that while producer control might be costly to the consumer, to transfer such control over the welfare of the industry to a party only indirectly

involved is to invite conditions likely to be more costly. An examination of the competitive and technical structure of this industry reveals that "no agreement will insure continuity of production in the future, which fails to provide a continuing joint agency which will concern itself not so much with the adjustment of grievances as with the constructive considerations of the underlying economic and technical facts by which all questions of wages, working conditions and earnings must in the end be determined."

NOTES

THE annals of building are scattered through hundreds of specialized periodicals; some technical, others devoted to competitive practices and business methods and still others concerned primarily with the problems of industrial relations. No attempt has been made to classify these scattered sources, but an examination of the references, which have been arranged by chapters, will acquaint the reader with the more important sources of information.

CHAPTER I

1. Clark, W. C., Chapter V, "Construction," in *Representative Industries in the United States*, edited by Warshaw, H. T., 1928, p. 184.
2. *Ibid.*, p. 187.
3. Hull, George H., *Industrial Depressions*, 1911.
4. Chart I is reprinted here with the permission of Thomas S. Holden, Vice-President in charge of Statistical Division, F. W. Dodge Corporation. The analysis can be found in a paper entitled "Building Contracts and Business Movements," read at the 1926 meeting of the American Statistical Association and later reprinted by the F. W. Dodge Corporation.
5. *Ibid.*
6. *Ibid.*, p. 11.

CHAPTER II

1. Freyer, W. J., *A History of Real Estate, Building and Architecture in New York City in 1898*, published by Real Estate Record and Guide Association, 1898, pp. 45 and 482, describes the technical methods in use in the building trades before 1900.
2. The development in England and on the Continent preceded that in this country by many years. The first building in which iron was used to a large extent was erected in Manchester, England, in 1801. The first complete cast-iron front in New York was made in 1846. In 1855 Peter Cooper, at his Trenton, N. J., mill, rolled the first wrought-iron beams ever used for floors. This iron was used in the Cooper Union Building in New York City. Successful tests of durability led to rolling the first "I" beams in New York in 1869. See *Engineering News*, July 15, 1885, p. 96; and May 30, 1885, p. 347.
3. Miller, Lee H., "Steel Construction," *Proceedings*, American Institute of Steel Construction, 1923, p. 1.

4. See *Elevator Constructor*, Oct. 1905, p. 14, for technical description of the various types of elevators and their history; also *Transactions*, American Society of Civil Engineers, Vol. IV, Part B, 1905.
5. In 1890 the Masonic Temple of 22 stories was built in Chicago. New York soon eclipsed this with the Park Row Building of 30 stories, the Singer Building of 47, the Metropolitan of 50 and the Woolworth of 51 stories. See Henrick, B. J., "Limitations on the Production of Skyscrapers," *Atlantic Monthly*, Oct. 1902, p. 486.
6. For a history of the development of steel construction see Purdy, C. T., "Steel Construction in Buildings," Bulletin of the University of Wisconsin, Engineering Series, Vol. I, 1894, pp. 41–67; also Birkmire, W. H., *Architectural Iron and Steel in the Construction of Buildings*, 1893, p. 1.
7. The introduction of steel can hardly be said to be the invention of one man. The use of columns in various ways is as old as buildings themselves. So is the use of lintels and beams. But almost the entire process of the development from these crude forms to the use of steel-skeleton construction occurred after 1885. Chicago architects claim the honor of beginning skeleton construction. W. L. B. Jennie designed the Home Insurance Building of Chicago in 1883. This building was of a cage-construction type with the ironwork bearing the weight of the floors alone. The Tower Building in New York, commonly known as the first steel-skeleton skyscraper in the world, was an improvement in that its skeleton frame bore the weight of both floors and walls. The practicability of this form of construction was discussed; and it was predicted that even if the steel skeleton could be erected, it would soon topple over. See *Iron Age*, June 16, 1910, p. 1411; and *Engineering News*, Aug. 24, 1899, p. 113.
8. Moran, D. E., "Foundation Development During Fifty Years," *Engineering News Record*, Apr. 17, 1924, p. 571.
9. A foundation must rest on solid rock or at least hardpan. The problem is not merely how to excavate down to rock bottom, but how not to disturb nearby buildings, which may be floating on a pocket of quicksand: if the pocket is tapped, or the water level lowered, disastrous results may ensue. To compensate for material excavated, a pressure equal to one hydrostatic head must be maintained by the use of compressed air. Sixty-eight caissons were carried to rock bottom, at a cost of $1,000,000, in erecting the New York Municipal Building.
10. A typical pneumatic caisson is a very strong shaft of wood, steel or reinforced concrete without a bottom. The top of the shaft is an air lock. The lower edge of the caisson, or working chamber, may be fitted with a sharp shoe to facilitate penetration. As lower depths are reached, the air pressure is increased to prevent infiltration of water either on the top or at the sides. On the roof of the caisson

some kind of masonry, usually concrete, is added outside the shaft. This forms a wall and supplies the needed weight. Materials and men are raised and lowered in the caisson by means of an air lock.

11. For a description of the development and present use of concrete in building construction see Tucker, R. F., "Progress and Logical Design of Reinforced Concrete," *Bulletin*, Building Trades Association, New York, June 1906, p. 70; Perry, J. P., *Building Age*, Mar. 1910, p. 119.
12. Alger, H. H., "The Use of Structural Steel Column Cores in Buildings," *Turner Constructor*, Turner Construction Co., Feb. 1928, p. 10.
13. *Seasonal Operation in the Construction Industries*, Report and Recommendations of a Committee of the President's Conference on Unemployment, 1924, Chapter VII, p. 71.
14. Thelen, Rolf, "The Substitution of Other Materials for Wood," United States Department of Agriculture, Report No. 17, 1917; also "Economic Aspects of the Lumber Industry," United States Department of Agriculture, Report No. 114, 1918. The per capita fire losses in the United States are computed by the National Board of Fire Underwriters.
15. The lumber industry is the largest of those producing building materials. In 1919 there were 568,000 wage earners employed in the production of lumber, timber and planing-mill products. The capital invested in the industry was over $1,720,000,000. The value of the product, at least 70 per cent of which is used in building construction, was $888,000,000. Steel, brick and cement, in 1914, replaced lumber to the extent of some 2,700,000 board feet annually. Metal shingles, tile, slate and various composition roofings replaced the wooden shingles to approximately 1,400,000,000 board feet annually. See *American Contractor*, Apr. 14, 1917, p. 80.
16. See *New York Times*, Oct. 25, 1925, p. 12.
17. The development of brick manufacture is well treated in Adams, J. C., "Improvements in the Methods of Brickmaking," *Report of Proceedings*, National Association of Builders, 1888, p. 32; Ries, Heinrich, *A History of the Clay Working Industries in the United States*, New York, 1909; Hutchins, R. T., "The Story of Paving Brick," *Report of Proceedings*, 37th annual convention, National Brick Manufacturers' Association, 1924, pp. 45, 102.
18. "Report of Commission on Housing and Regional Planning," Legislative Document No. 91, State of New York, 1925, p. 49.
19. Willis, H. P., and Beyers, R. B., "Portland Cement Prices," 1925, p. 73.
20. See review of "The Cement Industry" in *Monthly Letter*, National City Bank of New York, Mar. 1927.
21. *Engineering News Record*, Jan. 1, 1924, p. 38; Apr. 17, 1924, p. 667.

22. Compare these modern methods of conveying and excavating with those used in the erection of the Chicago Tribune Building 25 years ago. Most of the work was done by hand and the material was hauled up by that slow and tedious process, the hoisting rope being carried over a sheave down to a small wooden drum to which the crank handles were attached. Two or sometimes three men were required to hoist a bucket in this manner. Concrete was mixed by hand. *Engineering News*, July 11, 1901, p. 17.

    Before the use of modern methods of hoisting, a block of stone and an iron bar beam would be moved by aid of wooden rollers and pinch-bars to a point directly under the derrick, and when the clamps were put on, four men would apply themselves to the cranks of the windlass, another would tend the guy rope and often another would tend the tackle from the top of the building. In course of time the stone would reach the top, and with much tugging and pulling would be brought to position. This was the method in use 30 years ago when the steam derrick first made its appearance. Compare this with the methods used at the present time. Now the stone or beam is grappled at any part within reach of the sidewalk, a lever is turned, the steam windlass revolves twenty times as fast as the old type did, the top is quickly reached, another lever lifts the boom and guides it to the desired position and the stone is dropped just where it is wanted. Twenty times the amount of work is done that could be done with a hand derrick. See Freyer, W. J., *op. cit.*, p. 482.
23. For a description of the nature and growth of construction machinery now in general use, see *Engineering News Record*, May 22, 1924, p. 916; also *American Builder*, Mar. 1921, p. 102.
24. *The Bricklayer and Mason*, Mar. 1904, p. 8.
25. For a description of the changing content of the modern building see Jones, Bassett, "The Modern Building is a Machine," *American Architect*, Jan. 30, 1924; Thomas, M. T., "Mechanical Equipment of Modern Buildings," *Applied Science*, June 1914, p. 27. The modern methods of heating and ventilating in this country are due primarily to the work of Briggs, Baldwin and Billings during the '70's and '80's of the 19th century. The first building to be heated by steam was erected in Boston in 1850. The cast-iron radiator and boiler came into use in 1870. *Domestic Engineering*, Jan. 15, 1921, p. 137.
26. American Institute of Steel Construction, *Proceedings*, 1925.
27. United Brotherhood of Carpenters and Joiners, *Report of Proceedings*, 1904, p. 45.
28. *The Carpenter*, June 1908.
29. *Ibid.*, Nov. 1904.
30. *The Bricklayer and Mason*, Mar. 1904, p. 2.
31. For examples see *The Bricklayer and Mason*, Jan. 1907, p. 1.
32. Reported in *Bulletin*, Building Trades Association, New York, Sept.

1905, p. 228; also see Oct. 1906, p. 111; and *The Bricklayer and Mason*, Mar. 1904, p. 1.

33. *Engineering News*, Mar. 11, 1905, p. 282; Jan. 7, 1906, p. 24; and Jan. 11, 1906, p. 41.
34. *The Bricklayer and Mason*, Apr. 1909, p. 158.
35. *Ibid.*, Jan. 1910; Secretary, Bricklayers', Masons' and Plasterers' International Union, *Report*, Feb. 1912, p. 30.
36. Operative Plasterers' International Union, "President's Report," in *Journal*, Jan. 1912, p. 7.
37. For a complete history of this development see Barnett, G. E., *Machinery and Labor*, 1926, Chapter II, p. 30.
38. Richter, R. M., quoted in *American Contractor*, May 5, 1924, p. 29.
39. Zausner, Phillip, Secretary, New York District Council of Painters, writing on "Industrial Unionism," *Labor Age*, Sept. 1926, p. 4.
40. *Idem*, in an interview on Nov. 4, 1925.
41. For a justification of jurisdictional disputes on the basis of the requirement in the industry for speed see Ackerman, Frederick L., "Craftsmen, Machines, Credit, Speed," *Journal*, American Institute of Architects, June 1925, p. 249.

Chapter III

1. Federated American Engineering Societies, *Waste in Industry*, 1921, p. 65.
2. One who is thoroughly acquainted with many of the sharp practices prevalent in the building trades has characterized the typical attitude of the speculative builder as follows: "The charge on me for labor and materials does not last as long as does the income from the structure they put up for me, so no matter what the building costs me, I pass it along; and the problems of the building industry when I get through with it do not concern me. Why not, therefore, give the men more money and keep from having strikes that keep buildings from being completed?" See Beals, A. E., in *Dow Service Reports*, Oct. 3, 1925.
3. See American Institute of Architects, Document No. 186, "Functions of the Architect"; also, Kilham, W. H., "Some Phases of Modern Architecture and Practice," *Congress of Technology*, Massachusetts Institute of Technology, 1911, p. 474, for discussion of the present position and function of the architectural profession.
4. Figures published some years ago by the F. W. Dodge Company showed that architects handled more dollars' worth of building construction without contractors than general contractors handled without architects. This is particularly true in the smaller cities. Among contractors also, disputes as to jurisdiction over certain classes of work are not uncommon. Employers' associations make efforts to

keep general contractors from doing work which belongs to the "specialty contractors," and to prevent the latter from doing work which belongs to the general contractors. The same conflict often arises between the architect and the engineer. See "President's Letter No. 10," 1923, San Francisco Builders' Exchange.

5. Tudor, J. E., "The Architectural Profession in the Present Day," *Journal*, American Institute of Architects, Vol. 8, 1920, p. 125.
6. The American Institute of Architects was organized in 1858 but did not play an important part in the affairs of the industry for many years. At the present time the "A. I. A." has about 3000 members out of a possible 6000 in the entire country. After the war, when the organization began to realize that it was but a part of a larger industry, its structure was made more flexible and its program broadened. The membership was extended and a policy of coöperation with the other elements in the industry was adopted. Men like D. K. Boyd of Philadelphia, R. D. Kohn and Frederick L. Ackerman of New York and Stanley Parker of Boston represent the new approach. The Structural Service Department of the American Institute of Architects maintains contact between the architect on the one hand and the technician and manufacturer on the other. By coöperating with the Producers' Council, an organization of manufacturers of materials and devices used in building construction, waste and misstatement in advertising building products have been reduced. See *The Producers' Council*, published by the American Institute of Architects, 1927.
7. The term "general contractor" requires some definition. It is used by the public to indicate a contractor in any line of construction. But what is meant by the term in the industry is a contractor who takes a large job and then sublets part or all of it to other contractors.
8. Winton, H. O., *Bulletin*, Associated General Contractors of America, May 1921, p. 9; also *Engineering News Record*, Apr. 17, 1924, p. 664; June 2, 1921, p. 928.
9. For detailed description of the operation of a large construction organization, see pamphlet by Horowitz, J. L., President of the Thompson Starrett Construction Company, "A Modern Building Organization."
10. Probably the two largest construction corporations in the United States, if not in the entire world, are the Thompson Starrett Company and the George A. Fuller Company. Both organizations are equipped to erect practically the entire building. But they have, as a rule, subcontracted much of the work, although retaining for direct construction the more important trades. In some instances they also control material companies in order to protect themselves against high prices and to insure better delivery. Both corporations have close connections with real estate and financial interests.

11. The Bricklayers', Masons' and Plasterers' International Union has been strongly opposed to subdivision in the masonry trade. For some time the local unions of bricklayers in New York City were in conflict with their national officers because of the local opposition to subcontracting "fireproofing." In another instance the marble workers opposed subdivision in their trade which would have resulted in separate contractors having charge of the cutting, finishing and setting of stone. The president of the marble workers' union wrote in 1912: "We all know the final results of subcontracting and the menace it will bring to the members of our organization if it is allowed to continue. It is gradually spreading to the south and so far the marble setters have been unable to cope with the use of nonunion men. Unless it is nipped at once it will be extended to such an extent that the piece work system, of which subcontracting is the forerunner, will be established. The object should be to get the manufacturer to employ our men direct." *Marble Worker*, Apr. 1912, p. 74.
12. While no detailed statistics have been compiled as to the real facts in the case, the evidence thus far points to the greater economy of the contracting system, where properly carried on. On 20 California highways studied, 10 of which were built by contractors and 10 by state forces, the cost of the contractors' jobs exceeded the engineers' estimates by 39 per cent, while that of the day-labor jobs exceeded the estimated costs by 193 per cent. *Bulletin*, Associated General Contractors of America, Feb. 1924, p. 31.
13. Bent, A. S., "Economic Aspects of Day Labor," *Municipal and County Engineer*, Vol. 66, pp. 71–77.
14. *Commerce Year Book*, Vol. 1, 1926, p. 329.
15. *Bulletin*, Building Trades' Association, New York, Sept. 1906, p. 97. For mortgage loans by building and loan associations, see 1927 *Report*, United States League of Local Building and Loan Associations; for real estate loans by National Banks, see *Report* of United States Comptroller of Currency, Dec. 12, 1927; for real estate mortgages held by life insurance companies, see *Statistics*, Association of Life Insurance Presidents, Dec. 1927, and National Housing Association, *Housing Problems in America*, Vol. VIII, 1920, pp. 232, 233.
16. *American Architect*, Vol. 118, Oct. 1920, p. 536.
17. See an article entitled "Speculating in Homes" by A. C. Holden, consulting architect of the New York Housing Commission, *Atlantic Monthly*, Feb. 1928, p. 245. He points out that 27 cents of the building dollar go for original promotion and financing. This is to be compared with 21½ cents for land, 26½ cents for labor and 25 cents for materials.
18. For discussion of the evils resulting from the bonding of irresponsible contractors see Joyce, W. B., "The Contract Bonding Reform," *The Constructor*, Sept. 1924, p. 27; also *Engineering and Contracting*, Vol. 55, p. 193.

19. Reported in *New York Times*, Dec. 22, 1925.
20. *The Contractor*, Jan. 1, 1914, p. 31.
21. Comstock, L. K., "Elimination of Waste in Estimating," Bulletin No. 8, New York Building Congress, 1924.
22. *Building Age*, June 1919, p. 24.
23. *Engineering and Contracting*, Aug. 17, 1921, p. 48.
24. "The Eidlitz Plan," published by the Association of Electragists' International, Sept. 1923.
25. Beals, A. E., *Dow Service Reports*, Nov. 7, 1925.
26. Comstock, L. K., *op. cit.*
27. For illustrations of attempts to peddle bids of the New York subway contract, see *Bulletin*, General Contractors' Association of New York, June 1919, p. 100; for discussion of evils resulting from bid peddling, see *American Contractor*, Jan. 7, 1928, p. 18; Jan. 14, 1928, p. 14.
28. Jones, Bassett, "The Modern Building is a Machine," *American Architect*, Jan. 30, 1924, p. 93.
29. National Association of Builders, *Report of Proceedings*, 1894, p. 141; Wright, C. A., "The Quantity System of Estimating," New York, 1914; *American Architect*, Apr. 14, 1920, p. 475; and an article on "Estimating" by N. K. Holsman, in *Bulletin*, Associated General Contractors of America, Mar. 1920, p. 66.
30. Clark, W. C., in Chap. V, "The Construction Industry," in Warshaw, H. T., *op. cit.*, p. 205.
31. *Codes of Ethical Conduct*, Associated General Contractors of America, 1925, pp. 10–12.
32. "Statement on the Selection of Contractors," Sec. 8, Boston Building Congress.
33. See also National Association of Builders, *Report of Proceedings*, 1896, p. 46.
34. See *Chicago Tribune*, Feb. 20, 1926.
35. For a summary of the recent progress of the standardization movement, see Gries, J. M., "Standardization in the Building Industry," *Building Age*, May 1922, p. 35; Chase, S., and Schlink, F. J., "Standardization — Help or Hindrance," *New Republic*, Feb. 23, 1927; Baker, H. P., "How Trade Associations Bring About Standardization," in *Report of Proceedings*, American Trade Association Executives, 1923, p. 66; Kohn, R. D., "Standardization in Building Construction," *American Architect*, Vol. 115, p. 498; and "Elimination of Waste and Simplified Practice; What It Is and What It Offers," United States Department of Commerce, 1924.
36. Federated American Engineering Societies, *op. cit.*, pp. 59, 60.
37. *Ibid.*, p. 9.
38. Boyd, D. K., *Bulletin*, Associated General Contractors of America, July 1921, p. 15.
39. See "Trade Association Activities," United States Department of Commerce, 1928, p. 148.

Chapter IV

1. Parker, W. S., "Irregularity of Employment as a Factor in High Labor Cost," a paper read before the National Housing Conference, 1923, reprinted from *Housing Problems in America*, Vol. IX.
2. Council on Industrial Relations for the Electrical Construction Industry, "Detroit Decision," Mar. 15, 1921.
3. Boyd, D. K., "Seasonal Employment in Building Construction," *Engineering News Record*, Jan. 11, 1923, p. 63.
4. United States Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*, July 1921, p. 165.
5. *Ibid.*, May 1921, p. 107.
6. Federated American Engineering Societies, *Waste in Industry*, 1921, p. 65.
7. "Report on Seasonal Labor in the Building Industry," Boston Building Congress, 1923, p. 3.
8. "Analysis and Recommendations Concerning Seasonal Unemployment in the Building Trades of the Metropolitan District," Bulletin No. 3, New York Building Congress, July 1922.
9. "Survey of Seasonal Unemployment in the Building Trades of Portland, Oregon," Portland Association, of Building and Construction, Oct. 1924.
10. *Seasonal Operation in the Construction Industries*, Report and Recommendations of a Committee of the President's Conference on Unemployment, 1924, p. 23.
11. *Ibid.*, p. 6.
12. Hill, C. S., "Winter Construction," *Engineering News Record*, Oct. 2, 1924, p. 568.
13. General Contractors of San Francisco to San Francisco Wage Board, in letter dated Oct. 28, 1921.
14. *Monthly Labor Review*, July 1921, p. 167.
15. Council on Industrial Relations for the Electrical Construction Industry, *op. cit.*
16. National Industrial Conference Board, "Wages in the United States," 1926, p. 76.
17. Tead, Ordway, "Trade Unions and Efficiency," *American Journal of Sociology*, July 1916, p. 30. The full import of the problem of seasonal unemployment in relation to efficiency was felt in England soon after the war and the question still occupies a prominent place among the industrial issues in that country. The blame for reduced efficiency of workers in the building trades of Great Britain and for the resulting housing shortage was laid in large part to the constant fear of unemployment. The question for a time resolved itself into a demand for a guarantee of a full week's pay, and some experiments in pay for "wet time" were actually carried out. One thing at least was certain: All

groups recognized that a solution of the problem of reduced efficiency and restriction of output would have to be found in some guarantee of regular employment. Needless to say, such guarantee has not been found thus far, and the efficiency of the building-trades workers has been measurably affected.

18. The effort to increase the number of working days explains why the unions so tenaciously enforce their jurisdictional claims. To permit those who are not members of a particular union to work at the trade would result in reducing the number of working days and the wages of those who are members. This is akin to the old "lump of work" argument of a quarter century ago. The amount of work to be done is looked upon as the dividend and the number of workers as the divisor. The total number of days worked per year is the quotient. To increase the divisor by permitting workers not members of a particular union to do the work under its jurisdiction is to reduce the quotient and thereby to increase unemployment. Similarly, the question of apprenticeship restriction assumes a different aspect in view of the seasonal character of the industry. To permit unrestricted training of apprentices results in increasing the number of workers who lay claim to the work and in reducing the yearly wages per worker.
19. For the basis of the employers' opposition to the movement for the five-day week, see the "Five-Day Week Survey" made in March 1928 by the National Building Trades Employers' Association.
20. Building Trades Department, A. F. of L., *Report of Proceedings*, 1915, pp. 82, 91.
21. Only in industries where the control of the unions extended to every phase of production could this program of equalization of work mean very much. In the clothing industry, for example, during slack periods the work is equalized so that the workers are employed a few days each week. But here the employer has rather definite limitations on his right to "hire and fire" and does not possess unlimited control over his working force.
22. Lewisohn, Sam A., Commons, J. R., Draper, E. J., Lescohier, D. D., *Can Business Prevent Unemployment?* 1925, p. 1.
23. Greensfelder, A. P., *Address* to Meeting of Associated General Contractors of America, Oct. 5, 1925.
24. President's Conference on Unemployment, *op. cit.*, p. 69. Mr. J. Reid Kilpatrick of the George A. Fuller Company writes: "Going back over twenty years we find some of our most prominent buildings in New York were built in the winter time. The Atlantic Mutual Building and the new Broad Street Exchange Building were completed during the winter of 1900 and 1901. The methods of carrying them on were very similar to those which prevail today. The one difference is that in those days there were no hanging scaffolds. Instead of hanging the tarpaulins to protect the bricklayers on the

scaffold itself, a light framework was built up which was attached to the steel on the floor. . . . Excavating is now as simple and easy in the winter as at any other time of the year. We never see hand excavation any more. It is all done by steam shovels which can work in frozen ground very nearly as easily as they can in ground that is soft. The placing of concrete is not a serious problem. It is a very simple matter to heat the aggregate. We have poured concrete at forty below zero in Canada." "Review of Opinion on Winter Construction," *Engineering News Record*, Jan. 1925, p. 4.

25. For the feasibility of winter construction, see "Construction Equipment Past and Present," *Engineering News Record*, Apr. 24, 1921, p. 745; May 1, 1924, p. 785; May 8, 1924, p. 828; May 22, 1924, p. 916; June 5, 1924, p. 994; July 10, 1924, p. 81; also Hill, C. S., "Winter Construction as the Contractor Regards It," a series of 4 articles, *Engineering News Record*, Oct. 2, 9, 16 and 23, 1924.
26. See "Review of Opinion on Winter Construction" (*cit.*), for further evidence in this connection.
27. Dunlap, W. H., *Commerce and Finance*, Feb. 3, 1926, p. 265.
28. D. K. Boyd, Architect, Philadelphia, in interview, Oct. 5, 1925; also *Waste in Industry* (*cit.*), "The Philadelphia Plan," p. 53. An eastern construction company writes: "The representatives of our employment and inspection departments also keep accurately informed as to the exact time when jobs will be completed and new jobs will be commenced. Thus we are able to keep the men employed continuously as we transfer them from one job to another, instead of forcing them to lose a half day or a day in going to the employment department. In this way we take up the slack and have been able to carry out a given amount of work with fewer mechanics than otherwise would have been possible. In the past, most mechanics have lost at least two days a month in going about to secure work. For example, 200 men in the plastering craft forced to look for jobs in the old way would mean a loss of 3200 man hours in a month — enough time to complete two six-story buildings. Again, when bricklayers and plasterers were working in the open and laid off on account of rain, representatives of the association inspection and employment department found jobs for them immediately on inside work. In many cases men did not lose even an hour as they were taken from job to job in machines." *Monthly Labor Review*, Apr. 1923, p. 106.
29. Greensfelder, A. P., *Address* to Annual Meeting of the National Federation of Construction Industries, Apr. 1, 1922.

Chapter V

1. "Apprentice Education in the Construction Industry," discussions and papers presented at the 16th annual meeting of the National Society for Vocational Education, Dec. 1923, published by the Fed-

eral Board of Vocational Education as "Bulletin 92." See "Address" of D. K. Boyd, p. 18. See *New York Times*, May 27, 1923, for statement of James Baird, President of the George A. Fuller Co.

2. *The Bricklayer, Mason and Plasterer*, Nov. 1922, p. 242; also *Industrial Education Magazine*, Vol. 25, p. 276.
3. Meyen, G. F., "Why We Fail to Train Apprentices," *American Contractor*, Feb. 24, 1925, p. 29.
4. Douglas, Paul H., *American Apprenticeship and Industrial Education*, Columbia University Studies, 1921, gives a very satisfactory survey of the old apprenticeship systems and compares them with the present situation.
5. National Association of Builders, *Report of Proceedings*, 1889, p. 21.
6. Hoopingarner, D. L., in "Apprentice Education in the Construction Industry" (*cit.*), pp. 1–8.
7. See Chapter VIII of this book, pp. 204–207, for discussion of the various restrictions on apprenticeship enforced by the building-trades unions.
8. *Monthly Labor Review*, May 1926, p. 1055.
9. *Engineering News Record*, July 12, 1923, p. 45.
10. The effect of the apprenticeship training campaign, on at least one union, is shown by a comparison of the number of journeymen and apprentices enrolled in the Bricklayers', Masons' and Plasterers' International Union in successive years. In July 1921, the total number of journeymen enrolled in this union was 83,634 and of apprentices only 1437. In July 1922 there were 85,000 journeymen and 3623 apprentices. One year later, July 1923, there were 97,300 journeymen and 7263 apprentices, more than 5 times the number in 1921. In July 1925 the union claimed 111,304 journeymen and 11,576 apprentices. *Monthly Labor Review*, Sept. 1925, p. 206.
11. Fenner, Burt L., "The Cause of Our Shortage of Men," *Building Age and Builders' Journal*, Aug. 1923, p. 41.
12. "Practical Apprenticeship," Bulletin No. 1, Conference Board for Training Apprentices, 1916. This board is composed of representatives from the National Association of Manufacturers and the National Association of Founders and Metal Trades Employers. See also *Monthly Labor Review*, May 1926, p. 115.
13. Cowper, J. W., in "Apprentice Education in the Construction Industry" (*cit.*), pp. 9–16; also Dykeman, F. L., in *Report of Proceedings*, National Association of Brick Manufacturers' 38th annual convention, 1926, p. 56.
14. National Association of Builders, *Report of Proceedings*, 1889, p. 121.
15. *Ibid.*, 1895, p. 8.
16. National Union of Bricklayers, *Report of Proceedings*, 1868, p. 14; also "Report of Conference between Contractors and Unions," Chicago, 1900, p. 4.

17. Some of these restrictions appear stringent. For instance, the San Francisco bricklayers in their 1911 agreement with the contractors (Article 7, Sec. 1), allowed each contractor only 1 apprentice and specified that the latter was to serve for a period of 4 years. At each 2-year interval the contractor could take another apprentice. In Brooklyn, N. Y. in 1905, the lathers' union ruled "there shall be no more apprentices until after March 1908" (Constitution 1905, p. 10). Previous to this rule the union had admitted apprentices between the ages of 16 and 22 only, and had bound them directly to the union, which had a contract with the employer (Constitution 1904, p. 15). The plasterers of Cincinnati refused to allow a contractor any apprentices until he had been in business at least 2 years; he might then take an apprentice every 2 years, with a maximum of 2 for each shop (Agreement between Plasterers' Association and Journeymen Plasterers of Cincinnati, May 1913, Article 7).
18. For a full treatment of the employers' and workers' interest in apprenticeship see an unpublished monograph by Stewart Scrimshaw, "Apprenticeship — Principles of Administration in Industry and Education," 1927.
19. *Monthly Labor Review*, Mar. 1928, p. 174.
20. The 1915 agreement between the carpenters and their employers in Chicago stipulated that the apprentice was to be paid during the time he was at school as well as during the time he was at work. If he was not proficient at the end of the 4-year training period, the joint arbitration board determined whether or not this was the contractor's fault. If the contractor was to blame, he had to pay the difference between the apprentice rate and the regular rate. *Monthly Labor Review*, Oct. 1915, p. 33.
21. Dennis, L. H., "Apprentice Training in the Building Trades," Monograph of the Vocational Education Association, No. 2, 1924, p. 49.
22. See Chapter XVI, pp. 468–469.
23. The general provisions of an apprenticeship contract can be illustrated by examining those of the woodworking trades of New York. The minimum age for beginning apprenticeship is 16 years. The course of training covers 4 years, divided into periods of 6 months, for each of which a definite program is laid out which the apprentice is expected to complete before he can be advanced to the next stage. For the first 6 months the minimum daily wage of the apprentice is 30 per cent of the journeyman's daily wage for the last 6 months. The apprentice is to have a normal working week of 44 hours. During the first year he is paid half-time rates for the time spent in school, but thereafter he receives no compensation for school attendance. The school attendance is obligatory; and if the apprentice does not fulfill this obligation, the employer must release him and the union

expel him from membership. Apprentices pay to the general apprenticeship commission a semiannual fee equal to 1 day's wages at the rate set for the period of training. Such funds are used for apprenticeship development. "Apprenticeship System for the Wood Working Trades in the Metropolitan District," Bulletin No. 2, New York Building Congress.

24. The Apprenticeship Commission of New York was established in January 1921, but has been operating only since August 1, 1922. The Commission in Boston was established in March 1923 and that in Philadelphia a short time later. In no city has the plan applied to all trades at once. Application depended upon the relative shortage of mechanics and on the readiness of particular trades to coöperate. In Boston the system started in the woodworking and bricklaying crafts; in New York in the woodworking trades. The rules cover the following points: 1. Enrollment of the apprentice with the joint trade board. 2. Identification of apprentice in trade and at work. 3. Probationary period of apprentice before being finally accepted. 4. Maximum and minimum age for apprentice. 5. Term of apprenticeship. 6. Division of apprenticeship into periods of advancement. 7. Periodic examination of apprentices. 8. Granting of advanced credit to apprentices for previous experience in the trade. 9. Transfer system for interchange of employment. 10. Apprentice wages by periods, at work, in school. 11. Overtime work limits. 12. Hours per week at work; in school. 13. Determination of time for school attendance. 14. Enforcement of school attendance by employers; by unions. 15. Apprentice fees and dues. 16. Determination of apprenticeship classification of the trades within the jurisdiction of the joint board. 17. Statement of trade processes to be taught apprentices in each such classification, at work; in school. (The apprentice must have the opportunity to obtain all-around experience while he is at work). 18. Approved courses of study for apprentices in school, including technical studies related to the trades in which they are employed, and training for citizenship. 19. Supervision of apprentices at school; at work. 20. Periodic reports on apprentices to joint trade boards, from school; from work. 21. Regulation of adjustments, for employer; for apprentices. 22. Minimum ratio of apprentices to journeymen. 23. Approval of employer; indication that his work is sufficiently varied and equipment sufficiently complete to give apprentice the required diversity of trade experience to cover his trade classification. His ability to provide continuous employment for the apprentice during the apprenticeship period, subject to conditions not under control. 24. Special regulations as may be necessary. 25. Agreement by apprentice to abide by rules established. 26. Granting of diploma upon termination of apprenticeship. 27. The definite provision of classes in school for instruction of apprentices.

25. Glynn, F. L., "How are the Building Trades Training Apprentices," *Engineering News Record*, Jan. 11, 1923, p. 62.
26. Carrol, W. P., quoted in *American Contractor*, Nov. 21, 1925, p. 16.
27. "The Story of the Trade Schools," Industrial Association of San Francisco, 1923.
28. *Ibid.*, p. 3.
29. *The International Association of Heat and Frost Insulators and Asbestos Workers* provides that "local unions shall have the power to regulate the working conditions . . . of apprentices in any manner they deem proper." *The Bricklayers', Masons' and Plasterers' International Union* recognizes that since it is impossible "for the International Union to formulate and maintain a general apprentice law within its jurisdiction, it hereby grants to each subordinate local the power to regulate its own apprentice laws," subject to some restrictions: Every apprentice shall be registered with the international at the time of his indenture; no subordinate union is allowed to indenture apprentices to journeymen. Sons of members are exempt from this rule. The apprentice is required to fulfill the contract with the employer or leave the business. The term is 3 years. *The Bridge and Structural Iron Workers* have different problems to meet from other unions and have fairly detailed regulations over apprentices. The apprentice must be able to read and write, must be between the ages of 17 and 30, must serve 2 years. The number of apprentices in any local is limited to not more than 1 apprentice to every 7 journeymen on construction work and not more than 1 to 4 journeymen on ornamental work. *The United Brotherhood of Carpenters and Joiners* provides for age limits of 17 to 22, and permits the local councils to decide all other rules. *The International Brotherhood of Electrical Workers* leaves each local union to provide ways and means for governing their apprentices and helpers. The apprentice is admitted to the union only after he has had 1 year's experience. *The International Union of Elevator Constructors*, having more control than most unions over its local affiliations, provides for a 3-year term, 1 apprentice to each shop and an additional one for each 8 mechanics in the shop. *The International Union of Steam and Operating Engineers* has no regulations, since these are determined by legislation in states where engineers must be licensed. *The Granite Cutters' International Association of America* leaves the regulation of the number of apprentices to the locals, "but in no case shall there be more than three apprentices employed for each tool sharpeners' gang of journeymen, nor more than two when the number of journeymen employed is less than a full gang; when six or less are employed there shall be but one apprentice," and none unless there are at least 3 tool sharpeners. The term for granite cutting is 3 years, for tool sharpening, 2 years; and for polishing, 2 years. *The International Union of Hod Carriers and*

Building and Common Laborers of America has no apprentice regulations. *The Wood, Wire and Metal Lathers' International Union* provides that all apprentices shall work not less than 6 months on wood before being placed on metal and the term shall in no case be less than 2 years. The age limits are 16 to 21, and 1 apprentice is permitted for each shop. "The matter of shop distribution is left entirely to the will of the locals." The rules of the *International Association of Marble, Stone and Slate Polishers, Rubbers and Sawyers, Tile and Marble Setters' Helpers and Terrazzo Workers* apply to marble polishers only where there is a 4-year term. One apprentice is permitted for each 5 journeymen, but in no case are more than 5 apprentices allowed per year in any one shop. *The Brotherhood of Painters, Decorators and Paperhangers of America* does not admit boys over 21 unless by special dispensation. It provides for a 3-year term and compels apprentices to finish their terms with their employers, unless for a good reason the union permits them to leave. They are admitted to the union only in the last year of their apprenticeship. The local union is given full authority to regulate as to the number per shop or the ratio to journeymen. *The Operative Plasterers' and Cement Finishers' International Association of the United States and Canada* gives to the locals jurisdiction over the apprentice system, but in any local where there are not more than 25 members there are not to be more than 2 apprentices. *The United Association of Journeymen Plumbers and Steamfitters* provides that whenever necessary "local unions may allow each shop one apprentice, where they employ one journeyman steadily, and one additional apprentice for every five men steadily employed, up to 20. But in no case is any shop to be allowed more than four apprentices." The term is 5 years. *The United Slate, Tile, Composition Roofers', Damp and Water Proofers' Association* leaves to the local unions the control over the entire question. *The International Brotherhood of Steam Shovel and Dredge Men* requires 12 months' experience for firemen and oilers. *The Journeymen Stone Cutters' Association* provides for age limits of 16 and 20 years and for a 4-year term. For every 5 men in a shop, 1 apprentice is allowed, for every 15 men, 2; but in no case more than 3. Apprentices are not to be used on pneumatic tools and the local is allowed to regulate their wages.

30. The state supervision of apprentices in Wisconsin is applicable not only to the building trades but to all trades or occupations where a period of training is required in order that an apprentice may become efficient in his chosen trade or occupation.
31. *Monthly Labor Review*, July 1924, p. 221.
32. Hoopingarner, D. L., in "Apprentice Education in the Construction Industry" (*cit.*), p. 1; also "What the American Construction Council is Doing to Solve the Apprentice Problem in the Construction Industry," published by the Council, 1924.

33. An extensive national apprenticeship program was adopted in Canada in 1922, under the National Joint Conference Board functioning at that time. The scheme consists essentially of a National Apprenticeship Council with local apprenticeship councils in various localities. The function of the National Council is advisory, except in respect to matters referred to it for decision. The scheme includes certain rules and regulations which should govern such councils; also a standard form of indenture for apprenticeship, describing in general terms the relations which should exist between apprentice, guardian, employer and the local councils, the details for such indenture to be fixed by the local councils. The National Apprenticeship Council consists of 1 employer and 1 journeyman from each branch of the building trades and 2 industrial engineers who are members of their respective organizations and parties to the rules governing the council. See *Monthly Labor Review*, Apr. 1921, p. 145. In Great Britain, soon after the war, the movement took on an extensive character and national apprenticeship campaigns were carried on in the most important building trades where there was a shortage of mechanics. The Industrial Council of the Building Industry (the Builders' Parliament) had a special committee on this problem which considered the subject of methods of education in use to train apprentices, and the absence of an organized method of attracting boys to the trade, and appointed a committee to address the boys at the schools, to interest their parents and to recommend suitable boys for apprenticeship in the industry. On account of the after-war situation, the problem was more severe in England than in this country. There was a great shortage in the skilled trades of the industry and it was difficult to determine whether this shortage should be made up by the admission of apprentices or by the "up-grading" of skilled labor to a greater extent than the ordinary rules and customs of the unions allowed. The cause of the shortage was known. In the 3 years before the war the numbers in the industry had already greatly decreased because building was regarded as one of the worst trades from the standpoint of regularity of employment. During the war many skilled workers were killed, and the apprentices were not forthcoming in the usual numbers. See *Monthly Labor Review*, May 1920, p. 119.

34. "Report of Apprenticeship Commission," New York Building Congress, 1926.

35. Already the national officers of the Bricklayers' Union are sounding warnings of the danger to the journeymen which an excess of apprentices is creating. "This excess of apprentices went so far," declares the President of the Bricklayers, "that on one job in New York City (in 1926) there were as many as thirty apprentices. . . . The estimate is that New York has a ratio of one apprentice to every two and one-half journeymen." The result, he points out, is that it is impos-

sible for the union to keep its pledge to the boys; steady employment and proper instruction at the trade cannot be had under such conditions. At the same time the union is apprehensive that an excess in the number of apprentices will eventually redound to its disadvantage, in so far as the unemployed apprentice could be used to defeat the aims of the union during periods of industrial strife. The President and Secretary, Bricklayers', Masons' and Plasterers' International Union of America, *Report* (Fifty-seventh and Fifth Biennial), 1928, p. xvi.

Chapter VI

1. Bullard, F. L., *The Public Refuses to Pay*, p. 17, Boston, 1921, describes results of some jurisdictional rules of building-trades unions.
2. See testimony of John Donlin, former President of Building Trades Department, and of R. C. Marshall of the Associated General Contractors in *Report of Select Committee on Reconstruction and Production* (Calder Report), Washington, D. C., 1921, Vol. I, pp. 717, 1037.
3. Craig, E. M., quoted in *American Contractor*, July 28, 1928, p. 18.
4. American Federation of Labor, *Report of Proceedings*, 1902, p. 16.
5. Address to the National Board for Jurisdictional Awards, Oct. 18, 1925.
6. The President and Secretary, Bricklayers', Masons' and Plasterers' International Union of America, *Fifty-seventh Report*, 1928, p. xxxix.
7. "President's Letter No. 10," July 12, 1923.
8. See Whitney, N. R., *Jurisdiction in American Building Trades Unions*, Johns Hopkins Studies in Historical and Political Science, Series 32, No. 1, 1914, p. 95, for thorough treatment of the subjective causes of jurisdictional disputes. This study was written before the recent efforts to settle these controversies.
9. Building Trades Department, *Report of Proceedings*, 1909, p. 37.
10. The Department attempted to force compliance by entering into agreements with contractors to employ sheet-metal workers for such tasks. Such an agreement was made in Cincinnati. United Brotherhood of Carpenters and Joiners, *Report of Proceedings*, 1914, p. 41.
11. Building Trades Department, *Report of Proceedings*, 1913, p. 135; also *The Carpenter*, Mar. 1914, p. 11.
12. Their offer was this: If the sheet-metal workers would concede to the carpenters the right to erect all metal trim, the latter would agree to erect only union-made metal trim, and would concede to the sheet-metal workers the control over the manufacture of the product. If that agreement had been accepted the carpenters would have given up nothing, since they have never pressed the claim for the control over the manufacture of metal trim; and the sheet-metal workers would have found a powerful ally in their efforts to unionize the shops.

13. *The Bricklayer and Mason*, Jan. 1915, p. 1.
14. Secretary, Bricklayers', Masons' and Plasterers' International Union, *Report*, 1920, p. 912.
15. *Ibid.*, Dec. 1905, p. 391.
16. The Associated General Contractors of America submitted to a large number of contractors a questionnaire on the placing of steel in concrete and found: 20 cities used structural-ironworkers; 33, common laborers; 10 at times used both; 2 used rod workers (affiliated with the structural-ironworkers, but working at a lower rate of wages); 1 city used lathers. Laborers are used on nonunion jobs. See *Bulletin*, Associated General Contractors of America, May 22, 1920.
17. *The Constructor*, Oct. 1925, p. 28.
18. Employers also favor the claims of the common laborers in regard to unloading, handling or sorting of reinforcing steel, and the finishing of concrete. The former is claimed by the ironworker, though obviously an unskilled task, and the latter by the stonemasons and cement finishers, because tools are used. In many places laborers are not permitted to use tools.
19. See Deibler, F. S., *Amalgamated Wood Workers' International Union*, 1912, pp. 161–166, for a thorough treatment of the history of the union and its jurisdictional dispute with the Brotherhood of Carpenters.
20. United Brotherhood of Carpenters and Joiners, *Report of Proceedings*, 1894, p. 34; also 1896, p. 58.
21. *The Carpenter*, Nov. 1897, p. 7.
22. United Brotherhood of Carpenters and Joiners, *Report of Proceedings*, 1898, p. 63.
23. American Federation of Labor, *Report of Proceedings*, 1901, p. 253.
24. *The Carpenter*, May 1908, p. 19.
25. American Federation of Labor, *Report of Proceedings*, 1909, p. 290.
26. For discussion of disputes resulting from changes in methods, see Whitney, N. R., *op. cit.*, p. 106; also Bricklayers', Masons' and Plasterers' International Union, *Report of Proceedings*, 1904, p. 143.
27. United States Commission on Industrial Relations, 1914, Vol. 2, p. 1710; *Sheet Metal Workers' Journal*, Dec. 1908, p. 502.
28. For years the plumber was master of all piping; he did almost all gas fitting and steam fitting. The introduction of steam heating and gas for illuminating purposes created a demand for specialists in these particular branches; hence, the advent of the gas fitter as a distinct trade and the steam fitters who did all the screw-pipe work for steam and hot-water heating. In the evolution of the plumbing business lead pipes were superseded by galvanized pipes. The plumber naturally eyed askance the rapid growth of screw-pipe work and wanted to retain as much as possible. Craig, E. M., *American Contractor*, June 1923, p. 23.

29. The following paragraph shows the difference between the claims of the Granite Cutters' and the Masons' Union and illustrates how technical these claims are: "The stone mason is permitted to block or shape a rock faced stone with a pitching tool or wall hammer, use a point or hammer on reveal work, or run a chisel and plumb line; but when it comes to levelling down the reveal of a rock faced stone, which only requires to be given a few sharp raps with a pean hammer, or the pean end of a stone mason's wall hammer, in order to bring it to a more even surface, it is demanded that the stone be turned over to the granite cutter."
30. Building Trades Department, *Report of Proceedings*, 1913, p. 144; Secretary, Bricklayers', Masons' and Plasterers' International Union, *Report*, 1914, p. 494.
31. Building Trades Department, *Report of Proceedings*, 1914, p. 60; also *The Bricklayer, Mason and Plasterer*, Jan. 1916, p. 1.
32. *The Bricklayer, Mason and Plasterer*, Feb. 1906, p. 3.
33. Building Trades Department, *Report of Proceedings*, 1910, p. 28; see also for various phases of this contest, *The Bricklayer, Mason and Plasterer*, Jan. 1907, p. 1; and Mar. 1910, p. 51.
34. The stoppage on one project — the Palmer House in Chicago — lasted for 100 days with losses of $9600 per day, or approximately $1,000,000.
35. *New York Times*, Oct. 4, 1925.
36. *The Bricklayer, Mason and Plasterer*, Jan. 1927, Feb. 1927, also *Law and Labor*, Oct. 1927, p. 287.
37. United Brotherhood of Carpenters and Joiners, *Report of Proceedings*, 1908, p. 17.
38. *Ibid.*, 1912, p. 139.
39. *The Carpenter*, May 1915.
40. Building Trades Department, *Report of Proceedings*, 1919, p. 56.

Chapter VII

1. See Chapter XIV, pp. 405–406.
2. See Chapter XII, pp. 362–363.
3. See Chapter XIII.
4. For a discussion of the issues involved in the controversy between local and national control of jurisdictional disputes, see Commission on Industrial Relations, *Report of Testimony*, Vol. 2, p. 1583, 1601; also Building Trades Department, *Report of Proceedings*, 1909, p. 18. In 1913 the Building Trades Department definitely declared its opposition to local boards. It resolves "that we hereby condemn and declare null and void any and all decisions rendered by such boards of arbitration selected by local building trades councils and employers, unless such decisions are in conformity with the decisions rendered by

the American Federation of Labor and the Building Trades Department." *Report of Proceedings*, 1913, p. 121.

5. Constitution, Article IX, Section 11.
6. American Federation of Labor, *Report of Proceedings*, 1905, "Report of President Gompers," p. 23.
7. Building Trades Department, *Report of Proceedings*, 1911, p. 61.
8. See Chapter XI, pp. 331–334.
9. "The International Building Trades Council, Its Origin, Objects and Benefits," 1897, p. 8; also, "Constitution for Local Building Trades Councils," published by the National Building Trades Council, Jan. 1902.
10. *Labor Compendium*, official organ of the National Building Trades Council, Mar. 1905, p. 3; also *Bridgemen's Magazine*, Apr. 1905, p. 9.
11. Building Trades Department, *Report of Proceedings*, 1908, p. 10.
12. *Ibid.*, 1911, p. 119; 1917, p. 33.
13. *Ibid.*, 1913, p. 156.
14. *The Carpenter*, Sept. 1913, p. 29.
15. Letter to writer from the Hollow Metal Door and Trim Manufacturers' Association, Nov. 17, 1925.
16. As early as 1911 the President of the Building Trades Department was instructed "to get the idea of some of the general contractors and architects who were friendly to the Department along the lines of more friendly coöperation" to the end that the decisions reached by the Department in convention should be final as far as awarding certain work to certain trades was concerned. Building Trades Department, *Report of Proceedings*, 1911, p. 42; 1912, p. 70.
17. The members of the first Board were: E. J. Russel, representing the American Institute of Architects, as chairman; Rudolph P. Miller, representing the American Engineering Council; Colonel J. B. Wiggin and F. J. C. Dresser, representing the Associated General Contractors of America; E. M. Craig, representing the National Building Trades Employers' Association, and J. J. Hynes, Thomas R. Preece and William L. Hutcheson, representing the Building Trades Department. William J. Spencer, Secretary of the Department, was made Secretary of the Board, but he had no vote.
18. Constitution, National Board for Jurisdictional Awards, Rule 9.
19. Rudolph P. Miller, Chairman of the Board, in letter of Mar. 24, 1920, to the American Engineering Council.
20. Donlin, John, "A Review of the National Board for Jurisdictional Awards in the Building Industry: Its Conception, Formation, Ratification, Progress and Impediments," published by the Building Trades Department, 1923, p. 12.
21. Building Trades Department, *Report of Proceedings*, 1922, p. 85.
22. *Monthly Labor Review*, Apr. 1922, p. 126.
23. *Cincinnati Enquirer*, June 8, 1922.

24. Building Trades Department, *Report of Proceedings*, 1922, p. 109; 1923, p. 122.
25. *Ibid.*, 1922, p. 126.
26. *The Bricklayer, Mason and Plasterer*, Apr. 1927.
27. *Ibid.*, Dec. 1927, p. 30.
28. *Ibid.*, Feb. 1928, p. 28.
29. Building Trades Department, *Report of Proceedings*, 1912, p. 85.
30. Fox, Jay, "Amalgamation," 1922, published by the Trade Union Educational League, Chicago, p. 25.
31. The President and Secretary, Bricklayers', Masons' and Plasterers' International Union of America, *Fifty-seventh Report*, 1928, p. xxxix.
32. For a more complete development of the theory of jurisdictional disputes and of the various methods of prevention see Commons, J. R., "Jurisdictional Disputes," Chapter IV, *Wertheim Lectures on Industrial Relations — 1928.*

Chapter VIII

1. For a discussion of the ends which working rules seek to accomplish, see Kallen, H., *Education, the Machine and the Worker*, 1925, Chapter 14, pp. 97–98; Ardzooni, Leon, "The Philosophy of Restriction of Output," *Annals of the American Academy of Political and Social Science*, Vol. XCI, September 1920, p. 70; Perlman, Selig, *History of Trade Unionism in the United States*, 1923, pp. 190–191.
2. New York State Department of Labor, *Annual Report* (Twenty-fifth), Vol. II, 1907, p. lxviii, quoted in Davis, H. B., manuscript, *The Builders of New York*, Chapter IV, part II.
3. *Law and Labor*, Sept. 1927, p. 251.
4. Cleveland Chamber of Commerce, Building Cost Investigation Committee, "The Causes of Our High Building Costs in Cleveland," 1920, p. 26; *The Bricklayer, Mason and Plasterer*, Nov. 1923.
5. For illustrations of the operation of the "closed union" see "Does the Building Public of Cleveland Desire the Open Shop?" Cleveland Chamber of Commerce, 1925, p. 11; *Law and Labor*, Feb. 1927, pp. 38–40; "Final Report of the Joint Legislative Committee on Housing," Legislative Document No. 48, New York, 1923, pp. 24–26. For discussion of the situation of the New York electrical workers, see Broach, H. H, "Union Progress in New York," published by Local Union No. 3, International Brotherhood of Electrical Workers, 1929.
6. The President of the International Union of Steam and Operating Engineers, at their convention, as reported in the *Journal* (Oct. 1924, p. 295), said that this practice "led to a system of graft by business agents and officers of some of the local unions that is a disgrace to our International Union and to the entire labor movement. . . . These

men . . . are imbued with the idea that . . . because they are in that local union nobody else should come into it by transfer or application and that they have a divine right to work and others are only entitled to what surplus work may be going on in that . . . section. . . . Evidence was introduced . . . that . . . in Cleveland permit men, not members of our International Union paid a fee to work and members with paid up cards in their pockets walked the streets."

7. The opposition of the national officials to this practice was sincere. In the case of the painters, the national officers were responsible for the admission of the dual organization and for the liberalization of the entrance policy. In the case of the electricians, the international union waged an aggressive campaign against the practice, entered court proceedings to oust the local officials and completely reorganized the New York locals. Broach, H. H., *op. cit.*, and Saposs, D. J., *Left Wing Unionism*, 1925, p. 102.
8. *Monthly Labor Review*, Mar. 1926, p. 174.
9. Stewart, Ethelbert, "Labor Productivity and Costs in Certain Building Trades," *Monthly Labor Review*, Nov. 1924, p. 1.
10. An instance is the production schedule being developed by the Master Plumbers' Association of Montreal. This schedule fixes what the Association "after very full consideration of all the factors concerned" feels to be a fair and reasonable standard of production for Journeymen Plumbers and Steamfitters. *Monthly Labor Review*, July 1921, p. 138.
11. The practical difficulties involved in securing comparative data can be seen from the experience of the United States Bureau of Labor Statistics when it investigated the efficiency of bricklayers and other trades. "As the investigation progressed from city to city, it was found that in almost every line local styles and types of materials used made it necessary to abandon entirely certain points of inquiry. For instance, while bricklaying was covered in fifteen cities, roofing was scheduled in only ten localities and painting in only four. Painting was abandoned because the various color schemes on the same house prevented the agents from getting adequate samples of straight-away work. Composition roofing was found to be prevalent in some cities and almost unknown in others, with the result that it was necessary to confine the study practically to bricklaying." But even here when the Department agent was trying to secure the labor cost per 1000 common bricks laid in straight-away wall without opening, difficulty was experienced. "It was found that brick houses so common a generation ago are difficult to find. Structures of hollow tile, of cement and framework, and of steel are being faced with 'face brick' but obviously these are so particularized in their plans, particularly as to the brick finishing part that this work cannot be considered as ordinary brickwork; and solid brick walls are very

difficult to locate. In other words, the bricklaying of today is very different from that of twenty or even fifteen years ago." Stewart, Ethelbert, *op. cit.*, pp. 1, 2.

12. Gries, John M., manuscript of address to the National Association of Builders' Exchanges, May 20, 1925; see also, in "Report of Special Committee of the Boston Chamber of Commerce appointed to investigate the Building Situation," the testimony of V. P. Thornton, Vice-President of the Bricklayers', Masons' and Plasterers' International Union, Apr. 1921.
13. Ericsson, H., addressing the Association of General Contractors on "Union Rules Restricting Work," Cleveland, Jan. 18, 1922.
14. Bricklayers' Local Union No. 3, Boston, Rule IV, quoted in Ham, William T., "Employment Relations in the Construction Industry of Boston," 1926, a manuscript in the Harvard College Library.
15. See Table XVI, pp. 258–259.
16. Small contractors in the industry would "hire one or two men on a job who are young, athletic men, and far above the average in physique and ability to endure a very hard day's work, as leaders who set the pace for the other men." Through this method the men not able to keep up are gradually weeded out. Industrial Commission of New York, *Report*, Vol. VIII, 1901, p. 457.
17. Section 34, 1904, quoted in Davis, H. B., *op. cit.*, Chapter VI, p. 4.
18. See United States Commission on Industrial Relations, *Report*, Vol. II, 1914, testimony of Roswell Tompkins, p. 1601.
19. Boyd, D. K., interviewed in Philadelphia, Nov. 18, 1925.
20. *New York Times*, Dec. 31, 1925. For earlier attempts by the plasterers and tile layers to enforce a scale of work, see New York Bureau of Labor Statistics, *Annual Report*, 1890, p. 156; and United States Commissioner of Labor, Eleventh Special Report, on "Regulation and Restriction of Output," 1904, p. 304.
21. The 11th point of Mr. Untermyer's report in referring to these rules provided: "The existing provisions should be repealed and the unions and their delegates must be forbidden from hereafter enacting regulations that permit them to punish or discipline employers or members for the so-called offenses of 'rushing' or 'driving.' Every member should be left free to do as much work as he sees fit to do in a working day. The men should be encouraged to efficiency instead of being fined and discouraged. The regulation is thoroughly demoralizing and undemocratic, and is destructive of initiative, ambition, and individualism. It tends to make slackers and laggards of the men and to deprive them of their self respect. It measures the best and most upright of them, who want to do an honest day's work for an honest day's pay, by the standard of the laziest and poorest of his associates and renders the man fearful instead of ambitious to do an honest day's work. There is nothing in all the history of organized labor that

is so destructive of the morale of the men and so injurious to the cause and repute of labor. The struggle should be for efficiency. This regulation puts a premium upon inefficiency." "Final Report of the Joint Legislative Committee on Housing" (*cit.*), p. 32.

22. Montgomery, R. E., *Industrial Relations in the Chicago Building Trades*, 1927, pp. 160–161.
23. See, for specific rules, *ibid.*, p. 181.
24. The 1924–1926 agreement between the Master Painters of Springfield, Mass. and the local union stipulates that a worker who wishes to become an employer must meet the following tests of competency: He must be able to estimate work, to pay on a weekly basis (or to establish security if his ability is not positive); must carry sufficient liability insurance; must offer reasonable assurance that he can give employment to the local union members for at least 250 days each year. *Monthly Labor Review*, Sept. 1925, p. 604.
25. "Any member of the union figuring against the mason builders, or taking more than one contract to the amount of $50.00 while this agreement is in force, or being in business for a period of one month uninterruptedly shall be declared by the union to be a boss mason and his name stricken from the roll of the union." New York Local Union 21, By-Laws, Sec. 2, p. 46.
26. International Association of Bridge and Iron Workers, Local 372, San Francisco, Constitution and By-Laws, Sec. 29.
27. *The Bricklayer, Mason and Plasterer*, Nov. 1922, p. 246.
28. United States Commissioner of Labor, *op. cit.*, p. 311. See also International Association of Bridge and Iron Workers, Local 372, San Francisco, *op. cit.*, Sec. 90.
29. Ham, W. T., *op. cit.*
30. *Law and Labor*, Sept. 1927, p. 251.
31. *Ibid.*, p. 248; also, for illustrations of rules concerning "maintenance men" in New York, Boston, and Chicago, see Bullard, F. L., *The Public Refuses to Pay*, 1921, p. 8; Montgomery, R. E., *op. cit.*, p. 71.
32. Agreements in the Chicago industry provided for this restriction between 1911 and 1921: Montgomery, R. E., *op. cit.*, pp. 168–169.
33. Federated American Engineering Societies, *Waste in Industry*, 1921, p. 82.
34. See "Final Report of Joint Legislative Committee on Housing" (*cit.*), p. 31.
35. Operative Plasterers of Baltimore, Local 155, and Employing Plasterers' Association, Agreement, May 1, 1925, Sec. 8.
36. The New York City painters, for example, define "rushing" to mean doing inferior work, or less work than the specifications call for. *The Painters' Bulletin*, 1921, p. 7, quoted in Davis, H. B., *op. cit.*, Chapter VI, p. 10.
37. *Law and Labor*, Sept. 1927, p. 253.

38. Grant, Luke, "The National Erectors' Association and the International Association of Bridge and Structural Iron Workers," United States Commission on Industrial Relations, 1915, p. 95. An early agreement between the G. A. Fuller Co. and the Carpenters' District Council in New York recognized the right of the company to "discharge men from time to time who do not yield a fair and reasonable amount of work." United States Commissioner of Labor, *op. cit.* p. 315.
39. The payment for readiness-to-work is often an inducement to cut down absences, since the worker has assurance that he will be paid for from 2 to 4 hours if he reports to work as ordered. In winter work this inducement has been found insufficient and some employers even assure workers a full day's work or pay, irrespective of weather or other interferences. A typical regulation is the following: "Men ordered to report at the job at 8 A.M. and being laid off at that time shall be entitled to $\frac{1}{4}$ day's pay except when the case is beyond the control of the employer." Agreement between the Allied Building Metal Industries and the Housesmiths' Union, Local No. 52, New York, 1923.
40. Sec. 23 of the agreement between the plasterers' locals in Cleveland and the Cleveland Building Trades Employers' Association reads, "No employer shall be permitted to advertise for plasterers without first consulting the business agent of Local No. 80. If after 48 hours the business agent is unable to furnish men, the employer shall be permitted to advertise for same." On the other hand, the agreement between the carpenters and contractors in Cleveland in 1923 required the worker to give his employer one day's notice before quitting, in order to receive his pay in full at the time of quitting. *Monthly Labor Review*, May 1923, p. 155.
41. E. Grace, President of the Bethlehem Steel Corporation, testifying before the Lockwood Committee, New York City: the *Nation*, July 6, 1921, p. 13. For illustrations of building-material rules affecting electrical supplies and structural steel, see *Law and Labor*, Oct. 1927, p. 269, and *Bridgemen's Magazine*, Feb. 1920.
42. *Law and Labor*, Apr. 1927, p. 77.
43. The League for Industrial Rights represented many of the material manufacturers affected by the nonunion-material rules of building-trades unions. The attorneys for this organization have been in court constantly for 15 years in an effort to get the primary and secondary boycott applied to building materials enjoined. In 1910 the League appealed to the Federal District Court in New York City against the carpenters for calling strikes on jobs where woodwork was done by open-shop firms. In 1911 the League instituted a suit in the United States Court for the Southern District of New York on behalf of eight large nonunion producers of wood trim to enjoin inter-

ference with the marketing of their products in New York City through the refusal of union men to install them. This case was finally dismissed by the United States Supreme Court on the ground that a private party was not entitled to an injunction. Similar suits brought in different states yielded varying results. Some courts held such activities to be legal. Others condemned them as illegal. In 1924 the Bedford Cut Stone Company case involving 23 producers of Indiana limestone came to the Supreme Court in an effort to enjoin the Stone Cutters' Union from discriminating against the use of such stone in connection with building enterprises. On Apr. 11, 1927 the Supreme Court held the efforts of the stonecutters' union to enforce its rule that no member of the union shall handle stone "cut by men working in opposition" to the union, operated to restrain interstate commerce and was therefore illegal. The implications of this decision force the conclusion that every effort of labor unions to refuse to erect nonunion-made building materials will be unlawful if interstate commerce can be shown to be interfered with, a situation which is not difficult to prove. This case is probably the most important of all the cases involving boycotts of nonunion material. Strikes by plumbers in Pittsburgh against the erection of furnaces made by nonunion men in Ohio have been held to be similarly unlawful and enjoinable. Relief has been granted to a manufacturer of stone in New Haven against a combination of trade unions refusing to permit that stone to be handled within a given radius of the City of New York merely because it was not manufactured within a given geographical territory. The combination of mill operators and trade unions to exclude nonunion mill work from the City of Chicago, in order to hold the business and maintain prices which the combination set, has been also condemned as criminal conspiracy under the Sherman Act. The important cases are: Decorative Stone Company *v.* Building Trades Council of Westchester County, United States District Court, N. Y., Mar. 26, 1927; United States *v.* Brims, United States Supreme Court, Nov. 22, 1926. Bedford Cut Stone Company *v.* Journeymen Stone Cutters' Association, United States Supreme Court, Apr. 11, 1927. See also *Law and Labor*, Dec. 1926, Apr., May and July 1927.

44. See, for example, By-Laws, Journeymen Stone Cutters' Association, 1923, Sec. 24.

45. The rule of the local of plumbers and gas fitters in New York City provided in 1905: "Any member who through old age or physical disability may find himself unable to earn the standard rate may have his rating changed by the executive committee. Only one such worker in a shop is permitted, however." United Association of Plumbers and Gas Fitters, Local 480, By-Laws, 1905, p. 25.

46. McCabe, D. A., *The Standard Rate in American Trade Unions*, 1912, pp. 94–106.

47. Agreement between the Allied Building Metal Industries' Association, and Housesmiths' Union 52, June 4, 1923, Sec. 14.
48. It is charged that cement finishers in Boston oppose "accelerators" because these "hurry-up" the setting of concrete and make it possible to do the final troweling, which must be completed in the same day as the setting of the concrete, without working overtime. Bullard, F. L., *op. cit.*, p. 14. Several unions require the contractor to pay a minimum of one-hour overtime even if the work takes only a few minutes. For the practice among hoisting engineers of New York City, see. *Law and Labor*, Sept. 1927, p. 251.
49. *Monthly Labor Review*, Feb. 1920, p. 147.
50. New York District Council of Carpenters and Joiners, By-Laws, Rule 17, p. 24.
51. Smelser, D., *Unemployment and American Trade Unions*, 1916, p. 120.
52. See the Constitution of the Brotherhood of Painters, Decorators and Paperhangers (adopted in 1913 and amended in 1922), Articles 132 and 133; also *Law and Labor*, Feb. 1928, p. 41. A similar rule enforced by organizations which have some control over shop work as well as over job work — for example, steam fitters and sheet-metal workers — requires employers who secure a contract in a city other than the one in which they have their headquarters, to erect the shop work in the city where the contract is located, at the rates and conditions there prevailing. Thus, a sheet-metal contractor from Washington, D. C. who secures a contract in New York City must erect his shop work in New York. If he does the work in his regular establishment in Washington, he must employ New York sheet-metal workers under New York conditions and wages.
53. See *Law and Labor*, Nov. 1926, p. 294, for citation of cases dealing with this practice. The rule has been in court in New Jersey, Rhode Island, Pennsylvania, District of Columbia and New York.
54. Barker Painting Co. *v.* Brotherhood of Painters, Decorators and Paperhangers, United States Circuit Court of Appeals, Oct. 1926, reported in *Law and Labor*, Nov. 1926, p. 295.
55. For more recent instances of this practice, see *Monthly Labor Review*, June 1921, p. 124. These agreements have in most cases been declared illegal as "calculated to create a virtual monopoly." Brespica Construction Co. *v.* Stone Masons, 187 N. Y. Supp. 77, 1921.
56. The Bricklayers', Masons' and Plasterers' International Union, according to the President and Secretary in the 45th *Annual Report*, notified Local Union No. 21, New Jersey, that it would not recognize a mason contractor who was a member of his association as against one who was not a member. In several cases where members were permitted to work for nonassociation employers the wage rate was to be higher. Local Union No. 534, Burlington, Ohio, provided that nonassociation members should pay 15 cents per hour more (By-Laws,

Art. 3). The bricklayers and mason contractors of San Francisco agreed, in 1911, that an employer should not be expelled from the employers' association without the approval of the joint arbitration board, if by such expulsion he was automatically deprived of union labor.

57. Secretary, Bricklayers', Masons' and Plasterers' International Union, *Report*, 1927, p. 671; 254 U. S., 443.
58. *Monthly Labor Review*, June 1921, p. 124.
59. Section 7 of the 1920 plasterers' agreement in Cleveland reads: "The original contractor must finish a job, or any part thereof for which he may have a contract, and no journeyman plasterer will be permitted to work in such job for any one except such original contractor."
60. *Law and Labor*, Sept. 1927, p. 250.

Chapter IX

1. Zimand, S., "The Open Shop Drive. Who is Behind it and Where is it Going?" Bureau of Industrial Research, New York, 1921. This pamphlet examines statements and publications of leaders in the open-shop drive, to discover its purpose.
2. *Pocket Bulletin*, National Association of Manufacturers, Vol. 28, Aug. 1927, p. 7.
3. Classification used by Professor Selig Perlman in Labor Problems Course at the University of Wisconsin, 1925. John Fitch classifies the various kinds of shops into two groups: I. Open Shops which (*a*) permit the hiring of union and nonunion men, but give no recognition to unionism and provide for no collective bargaining; (*b*) permit the hiring of union and of nonunion men, without discrimination, but recognize the union as the representative of all employes. II. Closed Shops: (1) Closed nonunion — closed to union workers; and (2) closed union — shops in which (*a*) nonunion men are hired but must join the union, and (*b*) only union men are hired. *The Causes of Industrial Unrest*, 1924, p. 128.
4. Its existence among the railway unions and the Brotherhoods and in certain of the railroad shops has been used by employers as an argument that the closed shop is not needed. The unions in the railroad industry, however, occupy an especially strong position, by reason of the peculiar quality of the trade — its high skill, long apprenticeship and uninsurable risk. Since the union is recognized as the official spokesman for all workers, union as well as nonunion, and since a large majority of the workers do belong to the union (this is especially true of the locomotive engineers' union where this form of agreement is in operation), the unions do not stress the closed shop. It may be stated parenthetically that if the employers were willing to concede this form

of open shop with full recognition of the union as the representative of all employes, much of the objection which union workers have to the open shop would be eliminated. Not only do employers as a rule refuse to make this concession, but they propose that collective bargaining, if it is to be given any recognition at all, should be through some form of "company union" or works-council program.

5. Several unions in the building trades both in their national agreements and local arrangements provide for the preferential shop. In practice, however, the closed shop results, for the supply of labor has always been equal to the demand, except during the short period after the war. The preferential shop agreement is used exclusively in the clothing industry.
6. Correspondence between Newton D. Baker, President of the Cleveland Chamber of Commerce, and Samuel Gompers, President of the American Federation of Labor, published by the American Federation of Labor, Washington, 1923, p. 12.
7. The following statements of open-shop leaders at the American Idea Convention, held in Chicago in January 1921, are quoted by Zimand (*op. cit.*, pp. 5, 6). "It is unpopular to say you don't believe in the open shop, but I confess I do not quite know what the open shop means. To my mind it is a good deal of a question of non-union shop or unionized shop, and I hate to be a hypocrite under a resolution or anything else, or to vote or declare in favor of open shop when my own policy is not to carry that out, but to hit the head of the radical in my shop whenever he puts it up." Mr. A. M. Glossbrenner of the Indiana Manufacturers' Association replied: "I happen to be running a shop which I think is similar to yours, Mr. Gillette, in the manufacturing business, in that we will not employ an individual in any part of the plant that does not sign an individual contract in which it is expressed that he is not and will not become a member of a labor organization while in our employ. I am in favor of this resolution because the interpretation I give to it is that the open shop means to me that I can employ whomever I may please, as an individual employer." See also *The Nation*, Apr. 13, 1921, p. 529.
8. *The Clothing Workers of Chicago, 1910–1922*, Amalgamated Clothing Workers of America, 1922, p. 330.
9. See Chapter XIII, pp. 390–393.
10. In view of this situation, a distinction has sometimes been made between the "open shop" and the "open job." The former is the ideal of the American Plan where union and nonunion men work side by side without issue. In the latter only nonunion men are working. Thus the Landis Award jobs in Chicago were in reality open jobs and not open shop. In Detroit, on the other hand, a building is classified as under the "American Plan" if at least one trade is open to both union and nonunion men.

11. See *Open Shop Encyclopedia*, prepared by the Open Shop Department of the National Association of Manufacturers, 1921, Chapter VI. Also "Works Councils in the United States," National Industrial Conference Board, Research Report No. 21, for various illustrations of collective bargaining carried on with local plant organizations having no connection with regular trade unions. The testimony of James A. Emery to the Industrial Relations Commission in 1914 (cited in *Open Shop Encyclopedia*, *op. cit.*) and the proceedings of the President's First National Industrial Conference, Washington, 1919, also deal extensively with this issue.
12. See Dunn, R. W., *Company Unions*, 1927, pp. 175–183, for a discussion of union objections to the works council or employe representation type of collective bargaining.
13. Hollander, J. H., *Economic Liberalism*, 1924, p. 112.
14. *Bulletin*, Associated General Contractors, Feb. 1920, pp. 21–23.
15. United States Commission on Industrial Relations, *Final Report*, Vol. I, 1914, testimony of W. J. Spencer, p. 659.
16. For a thorough discussion of the reasons why the unions defend the closed shop, see Stockton, F. T., *The Closed Shop in American Trade Unions*, 1911, pp. 153, 164.
17. A recent agreement between the contractors and building-trades unions in Portland, Oregon frankly recognized this issue: "The matter of the possible injustice to the nonunion man by reason of giving the union man the preference when available was carefully considered and it was concluded that in view of the well recognized fact that the nonunion man held out for the same scale and the same hours that the union had succeeded in establishing that there would be nothing essentially un-American in insisting that since he wanted all the union had gained that he be expected to join them and contribute his share to the support of the council and thereby strengthen the work of the agreement." *Monthly Labor Review*, Dec. 1920, p. 94.
18. Lewis, H. T., "The Economic Basis of the Fight for the Closed Shop," *Journal of Political Economy*, Vol. 20, Nov. 1912, p. 928.
19. Only in San Francisco has the open-shop Industrial Association made any effort to maintain a definite wage scale as a minimum wage and to discipline employers who pay less than the established scale. See Chapter XIV, pp. 434–435.
20. Chapter XIV, pp. 438–439.
21. Lloyd, E. F., "The Closed Shop versus the Open Shop," National Industrial Conference Board, Prize Essays, 1919–1920, pp. 10, 11.
22. The Building Trades Employers' Association of New York instructed the delegates whom it sent to a national conference of builders held in Chicago in 1903, to oppose the open shop. When the conference adopted the open-shop program the New York organization refused to join. See the *Bricklayer and Mason*, Jan. 1904, p. 2.

23. "Does the Building Public of Cleveland Desire the Open Shop?" Cleveland Chamber of Commerce, 1921. While the results of this survey indicated that the "membership of the Chamber of Commerce, the holders of building permits, and a list of Cleveland firms" were in favor of the open shop, it is important to note that these groups do not include building-trades employers as a class.
24. The experience in San Francisco again illustrates the function which the union exercises in this connection. After the union was eliminated, the Industrial Association had serious difficulties in keeping its members in line — in maintaining the established wage rates and working conditions and preventing discrimination toward union members. On several occasions the unions were permitted to strike on jobs of the association members who refused to pay the association wage scale. (Chapter XIV, p. 422). As a matter of fact, a careful examination of the program enforced since 1921 shows that the employers either through the Industrial Association or through their own trade associations are recognizing the value of the union devices, such as standard wage rates and the normal day, as stabilizing factors and are enforcing them without the union. In this connection, see Eliel, Paul, "A Privilege which Imposes Obligations — the Philosophy of the Open Shop," published by the Industrial Association of San Francisco, 1921.
25. Barney, W. J., "Relation of Labor Schedules to Building Operations," *Engineering News Record,* May 5, 1926, p. 21.
26. *Ibid.*, p. 22.
27. Most of the trades which are organized at all are so organized that practically the same rules govern in all parts of the country, and a concern operating on a union basis can go into almost any section and pick up the men it needs and employ them under practically the same conditions as in their own towns. The restrictions in agreements between some local unions and contractors intended to hamper out-of-town contractors are comparatively few and chiefly confined to very large cities.
28. The Federal Trade Commission found some years ago that no more than 10 per cent of the manufacturing and commercial establishments of the country knew what their costs of operation were. See Correspondence between N. D. Baker and Samuel Gompers (*cit.*), p. 11.
29. Sargent, Noel, "A Practical Test of the Closed Shop," Open Shop Department of the National Association of Manufacturers, 1924.
30. Cleveland Chamber of Commerce, Building Cost Investigation Committee, "The Causes of Our High Building Costs in Cleveland," 1920.
31. Stewart, Ethelbert, "Labor Productivity and Costs in Certain Building Trades," *Monthly Labor Review,* Nov. 1924, p. 1.

32. Mr. Noel Sargent, Manager of Open Shop Department, National Association of Manufacturers, wrote to the author on March 28, 1928, that contractors in several cities had severely criticized the conclusions reached in this investigation and the methods used in making the calculations. They claimed that the union and nonunion jobs were not comparable and, therefore, produced results biased toward the union jobs.
33. Bingman, C. F., "Closed or Open Shop for Construction Labor?" *Engineering and Contracting*, Dec. 22, 1920, p. 140.

Chapter X

1. Commons, J. R., and Associates, *History of Labor in the United States*, Vol. II, 1918, p. 68.
2. *Ibid.*, p. 81.
3. *The Carpenter*, Oct. 1909.
4. Commons, J. R., and Associates, *op. cit.*, p. 69.
5. *Ibid.*, pp. 97, 128.
6. *New York Evening Post*, Nov. 5, 1825.
7. *The Mechanic*, Apr. 15, 1830, p. 17.
8. *New York Tribune*, June 25, 1844.
9. Commons, J. R., and Associates, *op. cit.*, p. 181.
10. *Columbia Centinel*, Apr. 23, 1825, p. 1.
11. The lot of the ship carpenters was often worse than that of the other workers. The hours were long. The work was arduous. "Employers were required to furnish liquor twice a day and the anti-rum movement meant anti-rest and longer hours." McNeill, G. E., *The Labor Movement*, 1887, pp. 33–36.
12. *Ibid.*, p. 340.
13. Commons, J. R., *Documentary History of American Industrial Society*, Vol. I, 1910, p. 466.
14. *Ibid.*, Vol. VI, p. 52.
15. *Ibid.*, p. 56.
16. *The Man*, May 13, 1832, p. .2.
17. Commons, J. R., *op. cit.*, Vol. I, p. 608.
18. *Semi-Weekly Tribune*, Aug. 10, 1850.
19. *The Carpenter*, Sept. 1906.
20. Commons, J. R., and Associates, *op. cit.*, Vol. I, p. 608.
21. Schlüter, Hermann, *The Inception of the German Labor Movement*, 1907, p. 7.
22. *The Carpenter*, Sept. 1906, p. 9.
23. *Fincher's Trade Review*, July 17, 1865.
24. *Workingman's Advocate*, Oct. 28, 1867; Oct. 2, 1869; Oct. 2, 1870.
25. In the erection of the Field Museum in Chicago, for example, the Thompson Starrett Company awarded the contract for stonesetting to a Massachusetts organization. The subcontractor used nonunion

stonecutters on the job, and the Chicago Building Trades Council struck on another large Thompson Starrett project in Chicago. Through this pressure the general contractor forced the subcontractor to enter into a 3-year agreement with the union. Building Trades Department, *Report of Proceedings*, 1913, p. 36.

26. *The Carpenter*, Oct. 1904, p. 7.
27. United Brotherhood of Carpenters and Joiners, *Report of Proceedings*, 1896, p. 14; *The Carpenter*, Aug. 1901.
28. See Chapter VI, pp. 161–163.
29. United Brotherhood of Carpenters and Joiners, *Report of Proceedings*, 1920, pp. 134–144.
30. Paine Lumber Co. *vs.* Neal, 244 U. S. 549; U. S. *vs.* Brims, 47 Sup. Ct. Rep. 169 (1926); see also Chapter VIII, pp. 224–226.
31. *The Bricklayer and Mason*, July 20, 1898, p. 2.
32. Lowell, J. S., Compiler, *Industrial Arbitration and Conciliation*, 1893, p. 64.
33. *The Bricklayer and Mason*, Aug. 20, 1899, p. 16.
34. *Ibid.*, Jan. 1912, p. 24.
35. *Ibid.*, Jan. 1912, p. 4; United Brotherhood of Carpenters and Joiners, *Report of Proceedings*, 1914, p. 81; "Report of President," 1920, p. 15; "Report of Secretary," 1920, p. 817.
36. Lowell, J. S., *op. cit.*, p. 69.
37. Of course, on a number of occasions the bricklayers did participate in a general movement with the other building trades. For example, they were part of the 1903 struggle in New York City and in the 1900 lockout in Chicago. But in the former city they were involved as a result of the initiative of the employers, and in the latter city they were the first to leave the ranks and sign an agreement. See also *The Bricklayer and Mason*, Mar. 1909, p. 56.
38. Bricklayers', Masons' and Plasterers' International Union, *Report of Proceedings*, 1916, p. 120.
39. *The Bricklayer and Mason*, Feb. 1906, p. 4, and *The Bricklayer, Mason and Plasterer*, Mar. 1913, p. 51.
40. The business agent of one of the unions described the influence of the union among the men in the industry as follows: "The organization has made men (out) of a lot of irresponsible bums. . . . We were only half civilized, just a lot of bums roaming about the country. But we are being educated and the union is doing it by raising wages and teaching us self-respect. The employers have changed, too. I remember when a bridgeman wearing a white collar couldn't get a job. The foreman would say that he was a dude, who didn't know his trade. It's different now. If a man is well dressed when he is looking for work, the foreman will size him up and conclude that he is a decent fellow who doesn't drink, or he could not afford to dress so well. So a neat appearance is an advantage today, but it is only a few years since the blue shirt fellows had it all in their favor. It's been a hard

fight, but the bridgeman today is a different fellow from the bridgeman of even ten years ago. The union has made mistakes. We realize that, but what could you expect of us? A lot of irresponsible bums can't be expected to be diplomats." Grant, Luke, "The International Association of Bridge and Structural Iron Workers," United States Commission on Industrial Relations, 1915, p. 10.

41. Mulcaire, M. A., *The International Brotherhood of Electrical Workers*, Catholic University of America, Washington, D. C., 1923, p. 91.
42. Silverstein, Louis, "The Story of the Painters' Union," *The New Leader*, New York, June 12, 19, and 26, and July 27, 1926.
43. United States Commission on Industrial Relations, Vol. I, 1912, p. 982; Granite Cutters' International Association, *Journal*, Mar. 1914, p. 6; July 1914, Jan. 1921, p. 6.
44. National Association of Builders, *Report of Proceedings*, 1889, p. 22.
45. *Report of the Industrial Commission*, 1901, Vol. VIII, 1901, "The Chicago Labor Disputes," pp. 113–115.
46. *Laborers' Journal*, Mar. 1907, p. 6.
47. Hod Carriers' and Building and Common Laborers' International Union, *Report of Proceedings*, 1904, p. 15; 1909, p. 65.
48. *The Bricklayer, Mason and Plasterer*, Jan. 1916, p. 28; Nov. 1920, p. 249.
49. *Federal Reserve Bulletin*, Aug. 1927, p. 563. See also National Industrial Conference Board, "Wages in the United States, 1914–1927," Chapter IV.
50. In May 1927, the average hourly rate for building laborers in the United States was $.854 while the average rate paid for common labor in 13 other industries on July 1, 1928 was $.449. *Monthly Labor Review*, Oct. 1928, p. 95.
51. See an unpublished manuscript by Nathan Fine, *The Business Agent*, for a description of his function and power, particularly in the building trades of Chicago.
52. For a thorough treatment of the business agent in the building trades, and particularly of the conditions which have given him the power to collect graft, see, a forthcoming book by H. B. Davis, *The Builders of New York*, Part II, Chapter V, "Democracy and Leadership," and R. E. Montgomery, *Industrial Relations in the Chicago Building Trades*, 1927, Chapter XI, "Graft in the Building Trades."

Chapter XI

1. American Federation of Labor, *Report of Proceedings*, 1888, p. 18. See also Gompers, Samuel, *Seventy Years of Life and Labor*, Vol. I, 1925, p. 341.
2. The purposes of the National Building Trades Council are stated in its Constitution (1897, Sec. 1): "The objects of this organization

shall be the encouragement and formation of building trades councils and local unions. The closer amalgamation of building trades workmen, to establish the eight hour day, to abolish the contract system on public work, an equalization of wages for the different building crafts. A national working card, a national correspondence league, to adjust differences in our own ranks, to establish a better feeling between employer and employee. To secure legislation in the interest of building tradesmen. To secure a mechanics' lien law, and to assist all branches of honorable toil to settle their own affairs without outside interference."

3. "Constitution for Local Building Trades Councils," Jan. 1902; also "International Building Trades Council, its Origin, Objects and Benefits," p. 8.
4. National Building Trades Council, Constitution (*cit.*), p. 17.
5. American Federation of Labor, *Report of Proceedings*, 1889, p. 156; see also, Glocker, T. W., "Amalgamation of Related Trades in American Unions," *American Economic Review*, Sept. 1915, p. 554.
6. *Labor Compendium*, official organ of the National Building Trades Council, St. Louis, July 1905, p. 3; also *Bridgemen's Magazine*, Apr. 1905, p. 8.
7. "Report of Conference for the Formation of the Building Trades Department," 1907, p. 4.
8. For a discussion of the significant reasons for the failure of the Alliance, see the *Carpenter*, Nov. 1903, p. 4; Dec. 1904, p. 16; Apr. 1905, p. 23; Sept. 1905, p. 9.
9. American Federation of Labor, *Report of Proceedings*, 1907, pp. 125–135.
10. "Official Report of the General Conference of Building Trades Affiliated with the American Federation of Labor," 1908, pp. 3–33.
11. Building Trades Department, *Report of Proceedings*, 1912, p. 85.
12. *Ibid.*, 1913, pp. 93, 94.
13. *Ibid.*, 1914, p. 76.
14. *Ibid.*, 1916, p. 81, 97–99.
15. The Bricklayers', Masons' and Plasterers' International Union withdrew from the Building Trades Department at the 1927 convention on account of its dissatisfaction with a decision involving a strike of its local unions in Baltimore. *The Bricklayer, Mason and Plasterer*, Nov. 1927, p. 276; Jan. 1928, p. 8.
16. The policy of the Federation, however, was not consistent. When the Department had difficulty with a large union like the carpenters, it supported the carpenters (American Federation of Labor, *Report of Proceedings*, 1911, pp. 31, 310–315); but when a smaller organization like the plasterers refused to keep in line, the Federation backed the Department (*ibid.*, 1912, p. 107).
17. American Federation of Labor, *Report of Proceedings*, 1914, p. 143.

18. It is interesting to note that the admission of these unions into the Department was indirectly brought about by the carpenters; for after their withdrawal in 1910, the Department, in its eagerness to regain some of the lost membership, voted to affiliate both organizations whose petitions had previously been denied.
19. Blum, S., *Labor Economics*, 1926, p. 316. A list of unions which have amalgamated since the organization of the Building Trades Department, though not necessarily through the influence of the Department, would include the following:
    United Brotherhood of Carpenters and Joiners and the Amalgamated Society of Carpenters and Joiners,
    United Brotherhood of Carpenters and Joiners and the Amalgamated Wood Workers International Association,
    Brotherhood of Cement Workers and the Operative Plasterers' International Association,
    Brotherhood of Cement Workers and the International Union of Building and Common Laborers,
    The United Association of Plumbers and the Steamfitters,
    The Amalgamated Glass Workers and the Brotherhood of Painters, Decorators and Paperhangers,
    The Marble Workers and the Bricklayers', Masons' and Plasterers' International Union,
    The Tile Layers and the Bricklayers', Masons' and Plasterers' International Union.
20. Building Trades Department, *Report of Proceedings*, 1913, p. 118; 1914, p. 71.
21. Zausner, Phillip, "Industrial Unionism," *Labor Age*, Sept. 1926, p. 4.
22. Glocker, T. W., *op. cit.*, p. 562.

Chapter XII

1. See Chapter X; also Davis, H. B., manuscript, *The Builders of New York*; and Winslow, C. H., "Conciliation and Arbitration in the Building Trades of Greater New York," Bulletin of the United States Bureau of Labor Statistics, No. 124, 1913.
2. Lowell, J. S., compiler, *Industrial Arbitration and Conciliation*, 1893, p. 64.
3. The policy of the bricklayers' unions in their relation with employers and with fellow unionists is illustrative of a type of union policy distinctly American in its outlook. Their acceptance of conciliation and arbitration put them in the good graces of their employers, at that time the most stable group of employers in the industry, and showed them the advantages of a conservative policy. The natural result of this conservatism was their refusal to participate in sympathetic strikes and to join the central organization of the workers in the

building industry. When the two central bodies of building workers in New York were fighting for control, the journal of the national union of bricklayers and masons significantly remarked that "we have all we can do to mind our own business — without interfering with any one else. It is upon this principle that we have met with success." The policy of the union toward their employers has always been "reasonable." A "conciliatory conservatism" is the term with which the bricklayers' journal described the policy of the organization. *The Bricklayer and Mason*, Aug. 30, 1898, p. 6.

4. *Bulletin*, Building Trades Association, New York City, June 1901, p. 7.
5. *Ibid.*, p. 1.
6. United States Commission on Industrial Relations, *Report*, Vol. XIV, 1914, p. 95.
7. United States Commission on Industrial Relations, *Report*, Vol. II, 1912, Testimony of Otto C. Eidlitz, pp. 1583–1788.
8. The George A. Fuller Company, a Chicago general contracting firm, had difficulty in establishing itself in the New York market. This company operates on a large scale throughout the United States. Its system of doing most of its construction through its own departments, instead of subcontracting it, makes possible more friendly relations with the Board of Delegates. Moreover, by this method it is able to complete a building more quickly, at a considerable saving to the owner. Workers generally are better treated, their grievances receive more immediate attention and working conditions generally are better. For all these reasons the company had tremendous difficulty in establishing itself with the New York employers and, according to the investigators of the 1903 struggle, its final success in so doing was attained by buying the support of the leader of the Board of Delegates, Sam Parks. Commons, John R., "The New York Building Trades," *Quarterly Journal of Economics*, Vol. 18, 1904, pp. 409–437.
9. *Record and Guide*, New York, Mar. 21, 1903, p. 552; *Bulletin*, Building Trades Association, May 1903, p. 65.
10. During the trouble in the early months of 1903 the subcontractors were contemplating an organization that would defend them both against the unions and against the general contractors who, they charged, were imposing hard conditions. The general contractors, however, soon came into the organization and dominated it. The subcontractors could not afford to vote against the wishes of their future employers and were helpless. As one contractor related, when the Building Trades Employers' Association was first formed the roll call was so arranged that a general contractor, a member of the powerful Mason Builders' Association, was first on the list; and when he voted the subcontractors present generally followed his lead. Agitation finally secured an alphabetical arrangement of the roll and

gave the subcontractors an opportunity to express themselves and vote before the general contractor's name was reached. Traitel, Benjamin D., former president of Building Trades Employers' Association, interviewed on Nov. 7, 1925.

11. *Bulletin*, Building Trades Association, May 23, 1903, p. 1022.
12. The communication contained the following: "For the last few years the conditions in our industry have been steadily growing worse until they culminated in the present cessation of work. As you can see from our platform and Plan of Arbitration, we have but one object in view, namely, to conduct our business relations on the fair, honest and American way, and we want *you* to help us. . . . No doubt our actions, our motives, and our plans will be attacked by those representatives of labor who are unwilling to be deprived of any powers which have been given them or have been assumed by them. . . . We refuse to believe that the rank and file of labor is acquainted with many of the acts of these representatives and of the conditions which exist in some of the trades, but how grievous they were is proven by the present standstill and the fact that within three weeks nearly thirty employers' associations of our industry have become a unit, as a living protest against oppression and extortion. We therefore call upon every conservative and thinking mechanic to attend the meeting of his union and register his vote against the un-American methods that have crept into the trade, and to insist upon the plan of arbitration as suggested."
13. Commons, J. R., *op. cit.*, p. 413.
14. *Record and Guide*, Aug. 8, 1903, p. 244; Dec. 1904, p. 1419.
15. Starrett, Theodore, "Why Labor Troubles Continue in the Building Industry of Greater New York," *Record and Guide*, Nov. 19, 1904, p. 1077. A series of articles by Mr. Starrett on the New York situation was later reprinted in a pamphlet, "Light on Some Dark Places." The clearest instance of collusion between unions and employers in building trades is that between the mason contractors and the bricklayers' unions. Labor referred to them as the "Siamese twins" of the industry. As early as 1888 a reciprocal agreement specified that fireproofing was not to be subcontracted and that it must be installed by the mason builder. This innocent clause excluded all outside contractors from the lucrative New York market for fireproofing, for only the New York contractors, members of the Mason Builders' Association, could install fireproofing. The defense of the New York locals rested on the ground that subletting developed a special group of bricklayers who do only fireproofing work. By preventing this the same bricklayers could have both inside and outside work and thus lengthen the building season. The National Fireproofing Company, a manufacturer of tile fireproofing, was particularly affected by this combination. It carried its complaint to the national union, which

ordered that the New York unions cease discrimination and permit fireproofing to be done by any contractor. The company reciprocated by agreeing to employ union labor exclusively throughout the country. The New York locals refused to abide by this decision, and in 1905 the national union revoked their charters. *The Bricklayer and Mason*, Mar. 1904, p. 2.

16. *Bulletin*, Building Trades Association, Jan. 1904, p. 22; May 1904, p. 87.
17. Grant, Luke, "The National Erectors' Association and the International Association of Bridge and Structural Iron Workers," United States Industrial Relations Commission, 1915, pp. 31, 39.
18. Bonnett, C. E., *Employers' Associations in the United States*, 1922, p. 165.
19. United States Commission on Industrial Relations, *Report*, Vol. II, 1914, Testimony of Otto C. Eidlitz, p. 644.
20. One labor leader testified: "The New York labor movement is at a low ebb. . . . This condition is due to an entire lack of harmony among the trades, wholly attributable to the arbitration agreement under which they have been working and which is sounding the death knell of unionism as it prohibits the sympathetic strike and allows the employers' association to single any one trade at any time it sees fit to crush it." *The Mechanic*, Aug. 1906, p. 24. Mr. Hugh Frayne, organizer for the American Federation of Labor, testifying before the United States Commission on Industrial Relations (*Report*, Vol. IV, 1914, p. 1781), opposed the plan because "it was composed of a number of dual unions; did not recognize the decisions of the American Federation of Labor and of the Building Trades Department; because it reversed the decisions of this authority; because it dealt with national issues in a local manner; because the dual unions which were organized by the employers invariably sided with the employers." See also Building Trades Department, *Proceedings*, 1912, p. 28.
21. United States Commission on Industrial Relations, *op. cit.*, Vol. I, 1914, Testimony of Otto C. Eidlitz, pp. 644–657.
22. *Ibid.*, Testimony of Samuel B. Donnelly, p. 1770.
23. There was no formal method of settling jurisdictional disputes for some years after the adjournment of the Arbitration Board. Through the influence of the chairman of the Board of Governors of the Employers' Association, committees of employers met with committees of union officials and agreed upon a solution for each case. Gradually the chairman of the Board of Governors came to act as the pacificator and conciliator and either brought the two parties together, or gave a decision without their presence. The decision was seldom rejected. By 1914 the Executive Committee of the Employers' Association assumed the responsibilities heretofore held by the chairman and set itself up as a body to hear all questions of jurisdictions. The unions assented, and this method has been in force ever since.

24. See Chapter VII, pp. 172–173.
25. Building Trades Employers' Association, Circular Letter No. 267.
26. Bonnett, C. E., *op. cit.*, p. 169.
27. Building Trades Employers' Association, *Handbook*, New York, 1926, p. 10.
28. The Association does not include one third of the employers in the building trades of the city, and in some trades its members employ less than fifty per cent of the labor. In some trades, however, from 60 to 95 per cent of the employers belong to the Association. The Association does not control the building industry of the city, but it does control the labor policy from the employers' side, because it receives support from other employers. See Bonnett, C. E., *op. cit.*, p. 170.
29. The bonus evil is not new in the building trades. But in the past five years it has assumed large proportions. Agreed wage rates meant very little when there was a shortage of mechanics in some of the trades during the summer peak. The agreement of the bricklayers in New York in 1923 specified $12 a day, but many employers offered between $16 and $20 a day.
30. *New York Times*, Nov. 23, 1925.
31. "Intermediate Report of Joint Legislative Committee on Housing," Legislative Document No. 60, State of New York, 1922; also, "Final Report," Legislative Document No. 43, 1923. The committee was appointed Apr. 18, 1919, and took testimony for some months.

Chapter XIII

1. Daley, John T., *Western Architect*, Dec. 1921, p. 126.
2. See Montgomery, R. E., *Industrial Relations in the Chicago Building Trades*, University of Chicago Press, 1927, pp. 13–15, for early history of unions in Chicago.
3. There was a complicated succession of strikes and lockouts which caused a loss of time and, according to a pamphlet published in 1887 by the Masons and Builders' Association, a loss of not less than $4,000,000 in wages. As a result of a lockout of 18 different trades for 9 weeks, 30,000 workers were involved, and all building brought to a standstill. "30,000 Locked Out," quoted in *Industrial Arbitration and Conciliation*, compiled by Josephine S. Lowell, 1893, p. 81.
4. Montgomery, R. E., *op. cit.*, p. 21. The writer is indebted to Dr. Montgomery for permission to examine his manuscript before publication.
5. Article VII of the Constitution, Sections 1 and 2, quoted in Bogart, E. L., "The Chicago Building Trades," *Political Science Quarterly*, Vol. 16, 1901, pp. 114–141.
6. Craig, E. N., *American Contractor*, Jan. 13, 1923, p. 23.

7. Bogart, E. L., *op. cit.*, p. 102.
8. *Ibid.*, p. 113; the statement appeared in the Chicago papers, Feb. 17, 1900.
9. "Report of Conference between a Committee of Union Men and the Building Contractors' Council," 1901, p. 10.
10. *Ibid.*, p. 12.

    For a detailed contemporary treatment of the 1900 lockout see the following: Lindholm, S. V., "Analysis of the Building Trades Conflict in Chicago from the Trade Union Standpoint," *Journal of Political Economy*, Vol. 8, June 1900, p. 326; Miller, J. A., "Coercive Trade Unionism as Illustrated in the Chicago Building Trades Conflict," *Journal of Political Economy*, June 1901, p. 321; George, E. J., "The Building Trades Conflict," *Quarterly Journal of Economics*, May 1901, p. 348; Bogart, E. L., *op. cit.*, p. 114.
11. *Bulletin*, Building Construction Employers' Association, Oct. 1923.
12. For a more complete account of the activities of the unions and contractors' organizations, see a series of articles in the *American Contractor* by E. N. Craig, Secretary of the Chicago Building Construction Employers' Association, especially May 26, 1923, p. 22; June 23, 1923, p. 21; July 7, 1923, p. 3. See also Building Trades Department, *Report of Proceedings*, 1909, p. 11.
13. Craig, E. N., *op. cit.*, July 21, 1923.
14. It had power to "determine, regulate and control the conduct of all members . . . in any and all controversies, differences, or difficulties arising between any member and employee or union relating to the terms and conditions of employment and all matters affecting the same." Article VIII of the Constitution, Sections 1 and 2, 1917, p. 9.
15. More than 75 per cent of the cases handled were jurisdictional in character. During the first 3 years, 1913–1916, 40 controversies were settled. Craig, E. N., *op. cit.*, Aug. 25, 1923, p. 19.
16. Several unions struck in sympathy with the marble workers. These were out in defiance of the central organization, because the marble work in the Field Museum was let to a nonunion eastern firm or, as some allege, in sympathy with the electrical workers who were out because so-called "maintenance men" were discharged. E. N. Craig, *loc. cit.*
17. When the agreement was ratified the Building Trades Council sent the following letter (dated Feb. 19, 1915) to the affiliated unions: "Our uniform agreement has closed the avenue of temptation and shut off the possibility of graft. The business agent who has forgotten how to live within an honest salary must retrench. . . . The arbitration agreement helps the man who works and gives him steady employment. But it exterminates the mercenary representative whose daily thought is of strikes and of the adjustment of them in

any way profitable to himself. The unions will be free from the mercenary strike curse which has stamped them a menace to the city." *American Contractor*, Oct. 20, 1923, p. 17.

18. In 1906 the Mason Contractors' Association broke away from the Contractors' Council largely because they were dissatisfied with the manner in which the affairs of that organization were run, and especially with the fact that the smaller contractors controlled the organization by virtue of their larger numbers. The split greatly weakened the Council and was responsible for its final disintegration in 1911.
19. Building Trades Department, *Report of Proceedings*, 1915, p. 48.
20. Craig, E. N., in the *American Contractor*, Dec. 22, 1923, p. 23.
21. Mr. A. M. Bing, prominent in New York City building-trades affairs and a keen student of labor problems, in an excellent review of the Chicago struggle in 1921, writes as follows about the choice of the arbitrator: "The choice of the arbitrator was a peculiar one and illustrates the haphazard manner in which so many of our industrial disputes are handled. A prominent figure in legal history, of magnetic personality and fearless character, Judge Landis was also dictatorial and erratic. He did not combine those fine qualities which make for conciliation and compromise in industrial arbitration. Rather than allow the parties to the arbitration to agree on the issues to be arbitrated, he soon injected his own aggressive personality into the controversy, and in a short six weeks, besides attending to his duties on the Federal bench in Chicago and as arbiter of professional baseball, he also tried to comprehend the ramifications of an industry, with its customs, rules and practices, some of them with a history of more than a quarter of a century. In the latter effort all impartial students of the subject, admit his failure and to the errors in this arbitration are blamed a major portion of Chicago's industrial struggle since 1921. In the opinion of one of the best known arbitrators in the country it will take twenty years to overcome the setback to arbitration as a means of settling wage disputes which Judge Landis' award provoked. He has done more to discredit arbitration than all those who favor it have done for it since the beginning of the labor movement." "The Posse Comitatus in Industry," *Survey*, Jan. 15, 1923, p. 493.
22. *American Architect*, Sept. 1921, p. 93.
23. Bing, A. M., *op. cit.*
24. *Monthly Labor Review*, Apr. 1922, p. 127; Oct. 1923, pp. 112–116. See also Holsman, H. K., "The Labor Situation and the Landis Building Trades Agreement," *Journal*, American Institute of Architects, Nov. 1921, p. 343.
25. Donnelley, T. E., addressing the American Institute of Architects.
26. The carpenters, having refused to support the decisions of the National Board of Jurisdictional Awards, were not members of the Building Trades Department.

27. "The Policy of the Citizens' Committee to Enforce the Landis Award," published by the committee, 1923.
28. Interviewed by the writer, Feb. 19, 1926.
29. *American Contractor*, Sept. 1, 1923, p. 21.
30. Statement of L. J. Horowitz, *loc. cit.*
31. *Ibid.*, statement of G. L. Griffiths, p. 22.

Chapter XIV

1. Kuhl, M. J., "San Francisco Today and Yesterday," *American Plan*, Industrial Association of San Francisco, Oct. 1923, p. 1.
2. *Ibid.*, p. 2.
3. For detailed treatment of the early history of the San Francisco labor movement, see Eaves, Lucile, *History of California Labor Legislation*, University of California Press, 1910, Chapter I; also Cross, Ira B., *Collective Bargaining in the Brewery, Metal and Building Trades of San Francisco*, University of California Publications in Economics, Vol. 4, No. 4, 1918, p. 235.
4. Cross, I. B., *op. cit.*, p. 241.
5. Hitchborn, Franklin, "The System, The San Francisco Graft Prosecutions," 1915, p. 92.
6. McCarthy's opposition to the Labor Council won him the criticism of many labor groups and finally led to his lifting the ban prohibiting building-trades unions from affiliating. Undoubtedly, his opposition was in part inspired by the fear that the Labor Council would rival the power of the Building Trades Council. This, however, never occurred. The two councils are entirely different in their organization and method of operation. The Building Trades Council could order constituent unions or members of constituent unions to take action in connection with any difficulty arising on a job or with an employer. The Labor Council, on the other hand, had and has advisory power only and has never permitted itself to go beyond this limit of action. On account of the complete industrial diversity of its membership, each unit in the Labor Council insists on remaining a free agent to work out its own destiny, subject only to approval by the Labor Council's general program and policy. The Labor Council cannot order a general strike of its membership, but the Building Trades Council can do this very thing.
7. United States Commission on Industrial Relations, *Final Report*, Vol. VI, 1914, p. 5172.
8. Many circumstances combined to cause McCarthy's downfall. He felt so strong in his power that he could not foresee the forthcoming struggle. The employers had been disorganized and docile for so long that it was unbelievable that they would ever challenge the building-trades unions. In 1921 the employers did, however; and

McCarthy, no longer accustomed to fight and having no trained generals, had to accept defeat. His power was gone and what remained of his prestige disappeared when in 1923 a state investigating committee found that he had received $10,000 from the Pacific Gas and Electric Company to oppose the Water Power Bill, then submitted to referendum. Soon after he resigned as the leader of the Building Trades Council. He is now engaged as a contractor in California.

9. Cross, I. B., *op. cit.*, p. 331.
10. "Permanency of officials in the Building Trades Council has been made possible in part by such methods as organizing unions to secure votes, dissolving obstreperous unions, hounding those men who opposed or objected to the policies of the Council's officers, interfering, sometimes by the use of 'strong arm methods,' with the election of officers and delegates of local unions, and manipulating the number of delegates allotted to each union by the rules of the Building Trades Department of the American Federation of Labor so as to give more than the allotted number of delegates in the Building Trades Council to favored unions." Cross, I. B., *op. cit.*, p. 334.
11. This attitude must be held in no small degree responsible for the animosity of contractors toward the building-trades unions for several years preceding 1921.
12. United States Commission on Industrial Relations, *Final Report*, Vol. VI, 1914, pp. 5211–5212.
13. *Ibid.*, p. 5122.
14. The exclusive agreement between the painters' union and the employers provided that the "Master Painters agree to hire only members of the Painters' District Council and that they shall so ascertain before employing them. District council No. 8 agrees not to work for any master painter who may be suspended or expelled from the Master Painters' and Decorators' Association for violation of the agreement. But in no case shall the expulsion of the Master Painters be final until ratified by the Joint Conference Committee and the Building Trades Council." See Board of Arbitration, *Record of Proceedings*, 1921, p. 116.
15. The unions were not alone responsible for all increases in the cost of building. The Chamber of Commerce of San Francisco made an independent investigation in which it found closed market agreements among contractors and material interests of the city for the purpose of boosting prices of building materials. Dealers in plumbing and electrical supplies had agreements or understandings with master electricians and master plumbers whereby only the latter could purchase such materials. The General Contractors' Association prohibited its members from quoting unit prices on any of their contracts or from segregating bids. "Any member of the Association who sublet a part of his contract to one not a member was fined ten per

cent. of the difference between the figure at which it was sublet to such non-member and the lowest figure of a member of the affiliated association." Brief submitted to the Arbitration Board, Apr. 16, 1921.

16. Board of Arbitration, *op. cit.*, Testimony, pp. 65, 105.
17. Bell, G. L., "Outline History of Industrial Association of San Francisco," Jan. 1925, manuscript in office of the Industrial Association, San Francisco. The writer is under obligation to Mr. Paul Eliel, of the Industrial Relations Committee of the Industrial Association, for permission to use this unpublished history, written by one who has played an important part in all the events since 1921.
18. Bell, G. L., *op. cit.*
19. The Temporary Award of the Board of Arbitration was concerned with the question of wages only. But the Board had a much broader program in view. "With wages fixed for a definite period this Board, which is a continuing one, will make a thorough study of general conditions in the industry. The Board desires, with the continued cooperation of both parties and the public, to develop some scientific studies of operating methods and practices so that there may be made available more facts and clearer principles for the fixing of wages and working conditions and for the constructive development of the industry. To the public at large, as well as to the industry itself, such matters are of more fundamental importance than the establishment of these temporary awards." The evidence presented as to wage differentials on the question of skill the Board held inconclusive and accepted the latest published statistics of the United States Bureau of Labor Statistics on the cost of living as the basis for their wage computation.
20. "It is true," the Board states in its "Supplementary Decision," "that the controversies in fifteen of these particular crafts were precipitated by demands of the unions for increases last July. . . . It is probably also true that in the preliminary meetings and discussions looking to arbitration, both parties had in mind as the predominating issue these . . . increases. However, the Board was not organized until the middle of January, 1921, and in the meantime conditions had greatly changed, and the signed agreements under which the Board came into existence represented the final result of a long series of discussions and negotiations in the course of which many new factors were introduced. Under this agreement, it seems to us clear that the Builders' Exchange was entitled, either during the course of the hearings or immediately after the termination thereof, to raise the issue of a decrease in all the seventeen trades. During the presentation of the evidence this issue was raised and there was nothing in the course of the procedure followed by both parties in the presentation of their case to indicate that the issues were intended to be limited

as is now suggested. Nor did the Building Trades Council in its replies to the statements and arguments filed by the contractors, make the point that the Board had no right to consider the question for decreases made in those statements and arguments."

21. The Building Trades Council officials wrote to one of the arbitrators as follows: "To deny wage increases would have been sufficient loss to workmen. To cut wages in any of the 15 crafts is beyond the power of the Board. The Building Trades Council accepted arbitration subject to the understanding that there were 17 specific wage issues, in 15 of which the Building Trades Council requested wage increases and in two of which the Builders' Exchange asked wage decreases. The right of your Board to decrease wages in 15 crafts was never understood or agreed upon. We, therefore, are petitioning that your Board reconsider, set aside and vacate your award." Letter in files of Building Trades Council.
22. Cited by G. L. Bell, *op. cit.*
23. Correspondence in files of State Building Trades Council of California.
24. This system was conducted by the Industrial Association through the Builders' Exchange from the beginning of the strike in 1921, being strictly observed and enforced until September 1, 1923. No permits were issued from September 1923, to May 1926, when, during the carpenters' strike, the permit system was again invoked. As a result of this system many contractors, particularly those engaged in the construction of homes, heretofore not amenable to regulation, being compelled to adopt the American Plan in order to get materials, found it advisable to join the Builders' Exchange. The Industrial Association, however, denies that any contractor was ever "forced" to affiliate with any organization in order to get materials. Associated General Contractors of America, *Bulletin*, Aug. 1921, p. 45; also Eliel, Paul, writing to the author on Sept. 14, 1928.
25. 293 Federal Reporter, 925.
26. 268 U. S. 64.
27. Reports of inspectors for the Industrial Association listed the following bits of information which must have served some purpose: Name of contractor; kind of journeymen; materials delivered by whom; owner banks with; owner borrows money from; contractor banks with; contractor borrows money from. The Industrial Association claims that that part of the inspector's form concerning bank connections was never used.
28. McBryde, Warren H., formerly President of the Industrial Association of San Francisco, in *Pacific Industries*, Feb. 1922, p. 13.
29. "An Analysis of the San Francisco Business Situation," The Industrial Association of San Francisco, 1922.

30. The Impartial Wage Board consisted of three members: the archbishop of San Francisco, an attorney and former city supervisor, and a wholesale druggist who had been president of the San Francisco Chamber of Commerce.
31. The Association made every effort to secure the coöperation of the unions, which were requested to nominate persons acceptable to them to serve on the Board. Since the unions refused to recognize the American Plan and the Industrial Association which was responsible for it, no official cognizance was given to the Impartial Wage Board. The latter was, therefore, appointed by the Association.
32. "Brief of the Industrial Association," covering the matter of the determination of a wage scale for workmen in the building industry by the Impartial Wage Board. This Board was appointed by the Industrial Association; the expenses of the hearings were borne by the Association, which also pledged itself to enforce the awards throughout the community. It is interesting to note that of the three members of the Board two were contributors to the original war chest against the unions. The name of Mr. H. U. Brandenstein appears on the contribution list for $100, and that of Mr. C. F. Michaels for $4500.
33. The unions were not officially represented at any of the hearings, and although many business agents appeared at the hearings, the Board complained of the absence of workingmen's testimony. The carpenters' union referred to the Board as the "imperial wage board" and refused to take part in the proceedings. "In justice to ourselves," the carpenters' union wrote, "we cannot appear before any board set up by a man or body of men that takes upon itself the prerogatives of dictatorship. . . . We feel that it is an autocratic assumption of power on the part of the Industrial Relations Committee of the Chamber of Commerce and as such, an attack upon the fundamental principles of American citizenship." Union men resented the fact that 2 of the members of the Board were contributors to the first anti-union war chest. Letter from Carpenters' District Council to General Contractors' Association, Oct. 31, 1921.
34. Eliel, Paul, interviewed Apr. 2, 1926.
35. *Idem*, writing to the author, Sept. 14, 1928.
36. Letter of June 6, 1921, in files of Building Trades Council, San Francisco.
37. "Rank and File" statement to the Federated Press, Aug. 27, 1921.
38. In order to break the plasterers' strike the Industrial Association not only guaranteed the contractors against losses because of delay or violence, but also offered an annual contract to the workers whom it hired to take the place of the strikers. This contract guaranteed employment, or in lieu of employment full-time pay for three-fourths of the working month. Owing to the boom then on in San Francisco

there had been no occasion to call for the enforcement of this part of the contract. In case there was no work at plastering the worker agreed to "work in any other department of the building trades . . . until such time as work in his particular craft was available." This provision of the contract, also, was never enforced. The contract was signed by 124 plasterers, of whom about 25 were union men. The work of the men was watched and if their output fell below what was considered a normal standard, their contracts were immediately canceled. A curious provision stated that "if the party of the second part fully performs all of the terms, conditions . . . of this agreement that at the end of each 30 full days of employment under the terms of the contract he shall receive from party of the first part, a bonus of $4 for each full working day actually worked during said period." This provision was an inducement to get plasterers to work, for the wage plus the bonus was $4 above the rate set by the Wage Board and $2 above the wage asked by the union. *Monthly Labor Review*, January 1923, p. 107.

39. The following is a partial list of contributors to the Industrial Association fund:

Alexander and Baldwin Ltd.	$10,000
American Factory Company	10,000
Anglo-London and Paris National Bank	15,000
Bank of California	15,000
Bethlehem Shipbuilding Corporation	20,000
California and Hawaiian Sugar Corporation	25,000
California Packing Company	10,000
Crocker National Bank	15,000
The Emporium	10,000
Firemen's Fund Insurance Company	10,000
Hawaiian Commercial Sugar Company	10,000
Matson Navigation Company	10,000
Market Street Railway Company	10,000
Mercantile Trust Company	10,000
Pacific Gas and Electric Company	15,000
Santa Fé Railroad	15,000
Southern Pacific Railroad	30,000
Pacific Oil Company	10,000
J. D. & A. B. Spreckles Company	25,000
Standard Oil Company	30,000
Union Oil Company	15,000
Wells Fargo National Bank	15,000
Welsch and Company	10,000
Associated Oil Company	15,000
Pacific Midway Oil Company	10,000

40. Since 1923 the Industrial Association has concentrated on a number of other industries. The general metal-trades group has been operating on the American Plan since before the advent of the Industrial

Association. The effort to eliminate the union from the foundries has been only partially successful. The union shops coöperated with their employers in relinquishing rules and other practices to enable them to meet the competition of the Industrial Association partisans. As yet, the building industry is the only one where the American Plan is successfully enforced.

41. George, W. L., interviewed on Apr. 5, 1926.
42. Eliel, Paul, in above-quoted letter to writer.
43. The Industrial Association, representing the employers, and officials of the carpenters' union negotiated the settlement of the carpenters' strike in 1926. The settlement was on the basis of a memorandum submitted to the entire membership of the several unions constituting the Bay Counties District Council of Carpenters. This is as close to an agreement, on the basis of collective bargaining, as anything in San Francisco in 7 years. *Idem*, writing to the author on Oct. 16, 1928.
44. *San Francisco Bulletin*, Apr. 1, 1926.
45. United States Department of Labor, Bureau of Labor Statistics, "Union Scales of Wages and Hours of Labor," Bulletin 431, 1928, pp. 11–53.

Chapter XV

1. See Chapter III, pp. 51–73.
2. "Early History of the Master Builders' Association of Boston," *Year Book*, 1911, p. 66.
3. Details of the developments in 3 different building centers have been treated in Chapters XII, XIII, and XIV.
4. National Association of Builders, *Report of Proceedings*, 1889, p. 13.
5. *Ibid.*, p. 13.
6. *Ibid.*, p. 3.
7. *Ibid.*, 1892, p. 40.
8. Article VIII, Sections I–IV.
9. "The National Erectors' Association, What It Is and What It Does," published by the Association, 1907. See also, Grant, Luke, "The National Erectors' Association and International Union of Bridge and Structural Iron Workers," United States Commission on Industrial Relations, 1915. This study presents a very complete history of the open-shop struggle between the Association and the Ironworkers' Union.
10. "Intermediate Report of the Joint Legislative Committee on Housing," Legislative Document No. 60, New York, 1922.
11. *Bulletin*, Associated General Contractors of America, Feb. 1920, p. 2.
12. *Ibid.*, Feb. 1921, p. 57.
13. *Bulletin*, Building Trades Association, New York, Jan. 1904, p. 25.
14. *Bulletin*, Cleveland Building Trades Employers' Association, Sept. 23, 1925.

Chapter XVI

1. Gries, John M., addressing the National Association of Builders' Exchanges on "The Building Congress," May 20, 1925.
2. For a discussion of the need of national organization in the building industry, see Miller, F. T., "Federation in the Building Industry," an address to the American Institute of Architects, Apr. 13, 1918; Marshall, R. C., *Bulletin*, Associated General Contractors of America, Jan. 1921, p. 10.
3. Kohn, R. D., "History of the Inception of the Congress Movement," New York Building Congress, *Year Book*, 1923, p. 7.
4. In 1916 Mr. Malcolm Sparkes, a Quaker employer, offered a permanent plan of coöperation between employers and building-trades unions in England, by means of a National Industrial Parliament for the Building Industry. The Parliament could not deal with questions of conciliation and arbitration, these being reserved to the regularly constituted arbitration machinery then in existence. Its program included regularization of wages, prevention of unemployment, employment of partially disabled soldiers, technical training and research, continuous and progressive improvement, and publicity. This Parliament issued the famous "Foster Report on Public Service in the Building Industry."
5. At the beginning the Congress appropriated $24,000 a year for its operation, and the New York Board of Education paid for teachers to carry on the classwork. Contractors and unions, both individually and through their associations, also subscribed to the work.
6. New York Building Congress, "Annual Report of the Apprenticeship Committee," Mar. 31, 1926.
7. Mehren, E. J., "How can the Spirit of Craftsmanship be Revived in the Building Industry?", *Engineering News-Record*, Nov. 20, 1924, p. 837.
8. R. G. Wagenet of the New York Building Congress, in a letter to the writer, Dec. 10, 1928.
9. New York Building Congress, "Report of Arbitration Committee," 1926, and "The Arbitration Court of the New York Building Congress," 1927; the latter gives an excellent survey of commercial arbitration as administered by the Building Congress.
10. Secretary Herbert Hoover, in an address at Chicago, Apr. 4, 1922.
11. Building Trades Department, *Report of Proceedings*, 1923, p. 55.
12. "Fifth Annual Message of President to Conference," 1926.
13. "There is no question that the recent rush to remedy a housing shortage in almost every state of the nation has resulted in the erection of buildings which either go up in smoke or fall apart during our lifetime. Up to 1915 the United States has had an unenviable reputation for its fire loss and for its annual repair bill caused by cheap

and unenduring methods. Since 1915 our building methods have not improved — they have in thousands of instances deteriorated." Franklin D. Roosevelt, addressing the American Construction Council, May 1925.

14. An extract from the statement by the American Construction Council on Better Building is as follows: "This situation (rapid depreciation of buildings) results from the activities of irresponsible groups found in every element of the industry. Faulty engineering, unreliable architects, inexperienced and incompetent contractors, inferior grades of materials, poor mechanics, inadequate and poor inspection and other bad factors too frequently enter into building work. These have serious effects but no more serious than unsound financing. Mortgage bonds are issued on speculative buildings. Many such issues are based on improper security and fictitious statements of earnings at abnormal interest rates. They find buyers because of the general ignorance existing in many quarters as to the requirements for good real estate securities. . . . Every element in the industry must bear its proportionate share of the blame for the vicious practices not infrequently found in building projects today, and for permitting practices within its ranks that do not measure up to proper standards."
15. *Constructor*, Jan. 1924, p. 23.
16. *American Contractor*, Mar. 10, 1923, p. 16.
17. *Monthly Labor Review*, May 1923, p. 184.
18. *Record and Guide*, New York, Apr. 21, 1923, p. 489; May 5, 1923, p. 579.
19. "Report of the American Construction Council on Building Conditions," May 16, 1923.
20. *Building Age*, June 1923, p. 85.
21. In New York City alone this warning was reflected in a reduction of contracts awarded from the high point of 12,000,000 square feet in March to 8,500,000 in May. No unemployment followed, because of the large volume of work already awarded. In 1925 a similar local crisis taxed the resources of the industry. A meeting of 500 contractors, architects and builders, in December 1925, concluded that the building industry in New York City was "on the edge of a very great disaster." Loans were made on "crazy propositions." Walter Stabler, President of the Metropolitan Life Insurance Company, and C. H. Kelsey of the Title Guarantee and Trust Company agreed that the building crisis was the worst in 40 years, owing to overproduction in high-class apartment houses, lofts and commercial buildings. *New York Times*, Dec. 16, 1925.
22. *New York Journal of Commerce*, May 25, 1925.
23. Hoopingarner, D. L., *Labor Relations in Industry*, 1925, p. 98.

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